

# **Waterway and Wetland Handbook**

## **CHAPTER 120**

### **DREDGING**

*(This chapter is currently undergoing revisions)*

#### **GUIDANCE PURPOSE AND DISCLAIMER**

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Regulating the removal of material from the bed of waterways.

#### **PURPOSE**

The removal of material from the bed of waterways is regulated to protect public rights against adverse impacts of "dredging." Potential impacts include turbidity, disturbance or destruction of aquatic organisms and habitat, release of contaminated materials, nutrients and other materials entrapped in the sediments and dissolved oxygen depletion.

#### **MECHANISM**

Section 30.20, Wis. Stats., regulates the removal of materials from the beds of waterways. A permit is required for streams and flowages where the bed is not owned by the state (see Handbook Chapter 30). A contract is required for lakes where bed material owned by the state is being removed. Dredging contracts can also be issued to authorize the sale or lease of minerals, ores, or materials beneath the bed of waterways. The court in State v. Dwyer, 91 W (2d) 440, (Ct. App. 1979), ruled that s. 30.20, Wis. Stats., applies to the removal of material from the bed of all waterways, navigable as well as nonnavigable.

#### **HISTORY**

Removing materials from the beds of navigable waters was first regulated pursuant to Chapter 85, Laws of 1872. Under this act it was a misdemeanor for any person to remove stone or rock from the bed of Lake Michigan. Although any person removing less than 50 pounds per month or any riparian proving that the removal did not endanger the property of others could not be found guilty under the act. The act also allowed municipalities to prohibit the removal of gravel, rock or stone from the bed of Lake Michigan within a strip extending 20 rods lakeward of the low water mark. However, anyone taking less than 50 pounds per month could not be deemed guilty of an offense.

The Local government's authority was extended by the statute revisers in 1878 (Section 4570), Stats.) to include protection of all navigable waters by prohibiting the removal of rock or stone from the natural bed of Lake Michigan, Green Bay, Lake Superior, Mississippi River or other navigable waters by non-riparians without consent of the Local government. Section 4570 was amended by Chapter 137, Laws of 1919 to regulate the removal of sand, gravel, clay or other substances in addition to rock and stone. Chapter 4 Laws of 1925, renumbered section 31.025, Stats., by Chapter 696, Section 264, Laws of 1955. Chapter 135, Laws of 1957 finally repeated s. 31.025, Stats., 34 years after removing materials from the beds of waterways was first regulated by the state.

Chapter 410, Laws of 1923 created Section 31.02(5), Wis. Stats., the first state control over removing materials from the beds of navigable takes. This section authorized and empowered the railroad commission to issue contracts for removing material from the bed of any navigable take. The Law allowed contracts up to 5 years if the removal was "in the public interest and the interest of the state." The Law also required the Railroad Commission to "fix and determine the compensation to be paid the State of Wisconsin for material so removed..."

The legislature amended Subsection 31.02(5) by Chapter 368, Laws of 1939 to eliminate contract compensation requirements for municipalities if the material was to be used for municipal purposes and not for resale.

Chapter 219, Laws of 1941 created Subsection 31.02(6), Wis. Stats., to allow issuing contracts for removing bed materials from outlying waters. Chapter 219 also created Section 20.203, Wis. Stats., which specified that all money collected from the issuance of dredging contracts was to go to the general fund to be appropriated to the Conservation Commission and the public service commission for patrolling outlying waters to enforce the condition of the contracts and "all Laws relating to conservation in such outlying waterways."

Chapter 712, Section 2, Laws of 1951, created Subsection 31.02(7), Wis. Stats., which prohibited people from removing bed material from any navigable lake or outlying waters without a contract and required that no person should "remove any material from the bed any lake or stream not mentioned above so as to leave any hole or other condition dangerous to human life."

Chapter 441, Laws of 1959, repealed Section 31.02(5) to (7), Wis. Stats., and created Section 30.20. This section required a contract for removing material from the bed of any navigable lake or from any outlying water. It prohibited removal from any other lake or stream that would leave a hole or other condition dangerous to human life and established a \$1,000 fine for violations.

Chapter 631, Laws of 1961, renumbered and amended Section 30.20(2), Wis. Stats., to become Section 30.20(2)(a). This act also created Section 30.20(2)(b), which required contracts for the "removal of minerals, ore, and other materials from the beds of navigable lakes and waters."

Through Chapter 614, Section 7 and 8, Laws of 1965, Section 30.20(1)(b), Wis. Stats., was amended to require permits for the removal of bed materials from any lake or stream not mentioned in paragraph 2 (navigable lakes and outlying waters). Section 30.20(2)(c) was created authorizing the Department to issue permits if the removal was consistent with the public interest. It also gave the Department the authority to adopt administrative rules.

Chapter 418, Laws of 1977, created Section 30.10(4)(c), Wis. Stats., to limit the Department's authority in farm drainage ditches. Farm drainage ditches in organized drainage districts were declared not navigable except where it could be shown that the ditches were navigable streams before ditching or had a previous stream history.

Chapter 391 of the same year amended Section 30.20(2)(a), Wis. Stats., to exempt additional municipal units (e.g. inland lake protection districts) from paying contractual fees for dredging.

Chapter 240, Laws of 1981, created Section 30.202, Wis. Stats., relating to the dredging and disposal of dredged materials in and near the Mississippi, St. Croix and Black rivers by the U.S. Army Corps of Engineers (Corps). This section allows the Department to enter into a memorandum of agreement with the Corps to implement recommendations of the Great River Environmental Action Team (GREAT) reports. The Law allows the use of GREAT-designated disposal sites under appropriate conditions and allows the consideration of sites not specifically designated in the GREAT reports.

Chapter 339, Laws of 1981, amended Section 30.10(4)(a), Wis. Stats., to change the applicability of navigability to farm drainage ditches. The revised subsection applies to any farm drainage ditch used for draining agricultural land regardless of whether it is in a drainage district. Such farm drainage ditches are declared not navigable unless they are shown to have been navigable streams before ditching. Similar changes were made in ss. 87.30(Lm)(b) and 144.26(2)(b)2.

Chapter 330, Laws of 1981, renumbered Section 30.20(1)(c) to Section 30.20(4) and created a new Section 30.20(1)(c). This subsection provides an exemption from permit requirements for removing materials from the bed of farm drainage ditches which were not navigable streams before ditching. However, the Department may require permits if the removal will have long-term adverse affect on coldwater fishery resources or destroy fish spawning beds or nursery areas.

## **LEGAL AND ADMINISTRATIVE INTERPRETATIONS**

### ***Wisconsin Supreme Court Decisions***

1. Angelo v. Railroad Commission, 194 Wis. 543 (1928): Several significant questions were answered in the decision. First, requiring contracts for dredging was found to be constitutional. The court determined that any contract the state enters into to remove bed material would require compensation. The Court also reaffirmed that the state owns the bed of navigable lakes and riparian owners own the beds of navigable rivers and streams subject to the public rights incident to navigation.
2. Reuter v. Department of Natural Resources, 43 Wis. 2d 272 (1969): This decision requires that the Department, when considering an application for a dredging permit, consider any effect on water quality or increase in water pollution which might result from granting the permit. While the Department must make a specific finding regarding water pollution, the weight of this finding depends upon the Department's judgment. Furthermore, the term "public interest" was stated to involve the public's use of the waterway for the all incidents of navigation (sailing, rowing, canoeing, bathing, fishing, hunting, skating, and other public purposes).

### ***Wisconsin's Court of Appeals Decisions***

1. State v. Dwyer, 91 Wis. 2d 440 (Ct. App. 1979): This decision stated that s. 30.20, Wis. Stats., applies to navigable and nonnavigable streams. Also, s. 88.90(3) does not negate the requirement to get a s. 30.20 permit.

### ***Opinions of the Attorney General***

1. OAG-109-74 (October 1, 1974): A riparian owner must obtain a contract or permit under s. 30.20, Wis. Stats., prior to removing material from the bed of any navigable water between a legally established bulkhead line and the ordinary high-water mark. This requirement holds whether or not the area between the bulkhead line and the ordinary high-water mark has been fitted.

### ***Department Interpretations***

1. A legal opinion dated March 5, 1973, indicates that authority to dredge is not required for removal of a floating bog. However, section 30.125, Wis. Stats., relating to the removal of aquatic vegetation, and various provisions of Chapter 29 dealing with rare and endangered plant species may come into play. See Handbook Chapter 190. Furthermore, s. 30.15(2) allows placement of a temporary boom in navigable waters for the purpose of catching weeds, provided that the Department consents to that placement. This provision would appear to be the only authority normally required under Chapter 30 for removal of floating bogs.
2. A May 2, 1974 legal opinion was issued concluding that the words "any material" in a. 30.20, Wis. Stats., would not require a permit for removal of man-made obstructions such as bridge abutments.
3. A legal opinion dated February 15, 1980 indicates that the Department is not required to deny a s. 30.20, Wis. Stats., dredging permit merely because the county cannot or will not issue a permit which is required by the county zoning ordinance for dredging in the floodplain. However, the Department may dismiss an application for a s. 30.20 permit, in such a situation, without prejudice, refusing to consider the application for a s. 30.20 permit until a county permit has been issued. If the Department does issue a s. 30.20 permit, it should contain a provision that the permit will not be effective until a county permit is obtained.
4. A January 2, 1981, program guidance memorandum on Chapter NR 345, Wis. Adm. Code, commented section by section on implementing the rule. The comments did not constitute standards or mandatory procedures, but rather direction and details for staff use. A copy is attached.
5. A February 18, 1982 program guidance memorandum provides direction and details for staff use on implementing Chapter NR 347, Wis. Adm. Code. This guidance has been incorporated in the "Application" section of this chapter.
6. In a March 4, 1982 memorandum, Robert W. Roden, Director of the Bureau of Water Regulation and Zoning discussed the interaction between the regulation of utility trench crossing excavations under Chapter 30, Wis. Stats., and solid waste requirements contained in Chapter NR 180, Wis. Adm. Code. The applicability of Chapter NR 180 was concluded to be based on the net volume of material to be placed in an upland site. NR 180 automatically exempts the disposal of under 3,000 cubic yards of dredged material from the solid waste licensing procedures. Disposal of over 3,000 cubic yards would require individual review.

## **STANDARDS**

### ***Statutory Standards***

Section 30.20, Wis. Stats., requires that:

1. Dredging permits be consistent with the public interest;
2. Dredging contracts be consistent with public rights, protect the public interest, and the interests of the state;
3. No contract can run for a period longer than 5 years; and
4. No mining contract can run for a period longer than 75 years.

### ***Administrative Standards***

NR 1.95, Wis. Adm. Code, establishes general standards to be applied by the Department in decisions affecting wetlands. The Department shall consider proposals which require its approval with the presumption that wetlands are not to be adversely impacted or destroyed and that the Least overall adverse environmental impact shall result.

NR 115 establishes administrative standards which must be followed by counties in their administration of shoreland zoning ordinances. These standards shall be reflected in permits and contracts issued pursuant to s. 30.20, Wis. Stats.

NR 116 establishes administrative standards which must be followed by local units of government in their administration of floodplain zoning ordinances. These standards should be reflected in permits or contracts issued under s. 30.20, Wis. Stats.

NR 150 prescribes the proper level of environmental assessment for various kinds of dredging. An environmental impact screening worksheet is required for all non-maintenance dredging and nonnavigable waterway dredging which involves draining or filling of wetlands.

NR 180 governs the procedure and standards for solid waste disposal sites and facilities. All dredging projects require review under Chapter NR 180.

NR 200 governs the procedures and standards for the Wisconsin Pollutant Discharge Elimination System (WPDES) under chapter 147, Wis. Stats. An individual WPDES permit is required for dredging project discharges which do not meet the applicability criteria for the general WPDES dredging permit issued under s. 147.023, Wis. Stats. (copy attached)

NR 340 would only apply when the dredging is for the commercial extraction of sand and gravel project. Extensive additional procedural requirements are found in NR 340. Bonding and restoration plans are also required in NR 340.

NR 345 does not include standards. It reiterates the conclusion in the case Wisconsin v. Dwyer, which requires a permit from the Department to authorize removal of materials from the beds of nonnavigable waterways as well as navigable waterways, and contains general procedures to be followed for all dredging activities.

NR 346 (dredging contract fees) does contain standards. The primary purpose of this rule is to establish two different classes of dredging projects, commercial and noncommercial, to clarify procedure and establish the amount required for bonds associated with dredging projects.

NR 347 (regulation of dredging projects) does not include standards. The purpose of this rule is to provide a single mechanism to assure that requirements of the water regulation program, the industrial wastewater program, the waste treatment plan approval program, the WPDES and the solid waste management program are appropriately reflected in decisions which regulate dredging made by the Department.

## **PROCESS**

### ***Application***

An application for a permit or contract under s. 30.20, Wis. Stats., to remove material from the bed of a waterway must include the information specified in NR 347.07 - 347.11, Wis. Adm. Code. It is important to note that all informational requirements included in NR 347 will be required for only a few projects. In general, only projects proposed for an environmentally sensitive dredging area or disposal location or those involving hazardous wastes or PCB's will call for full application of all information requirements of NR 347. It is up to Department staff to determine the amounts of information required for most other dredging projects. This discretion is allowed by Section NR 347.05(5). Figure 1 and Table 1 give the process of determining information needs.

### ***Notice Requirements***

The issuance or denial of a dredging permit or contract does not require either a notice of the proposed action or a public hearing.

Consideration should be given to issuing a news release for large, complex, or environmentally sensitive dredging projects. Many dredging projects can significantly affect the environment and public and private rights in the waterway. A public information hearing can be held by Department staff if significant issues or public interest is involved.

A news release is required if an environmental assessment is done. See subsection NR 150.04(8)(a), Wis. Adm. Code, for details.

### ***Field Investigation***

For a proposed dredging project the area to be dredged and the areas where the dredged material may be placed should be evaluated. The degree of Investigation necessary depends on the project's size and local environmental characteristics. Pertinent considerations regarding the area to be dredged include aquatic habitat, public use of the area, and how dredging may affect both those concerns.

During the excavation phase of a dredging operation, the following effects are commonly short-term:

- creation of turbidity and reduction of light penetration,
- disturbing and destruction of aquatic organisms and habitat,
- resuspension of contaminated materials in the water column,
- dissolved oxygen depletion,
- release of nutrients and other materials entrapped in the sediments, and
- creation of floating scum and debris

Long-term effects of the excavation phase of a dredging operation are related primarily to modifications of bottom geometry and the benthic community. The formation of trenches or isolated areas of overdredging below the normal grade of the bottom tends to create pockets of stagnant water wherein oxygen depletion and the degeneration of the biologic communities are more likely to occur.

Environmental and aesthetic concerns with the material transportation phase of dredging are related to operating techniques. Mechanical dredges all transfer the excavated material either directly to adjacent disposal sites or into trucks or scows. To reduce turbidity and careless spreading of the material it is essential that buckets are maintained in good condition to ensure a tight fit when closed and scows or dump bodies are sealed. With hydraulic dredges, transport is either in bulk as with hopper dredges or by slurry in a pipeline. Apart from badly-fitting couplings, breaks or other maintenance difficulties, pipeline transport itself is unlikely to cause significant environmental impacts.

A second area of concern is the proposed disposal site for the dredged material. In general, placement of dredged material destroys existing vegetation, small mammals and immobile organisms. Depending on the material's composition and subsequent disturbance of the site (for material re-use, as an example), dredge material disposal sites frequently revegetate after a period of a year or two. However, experience has shown that significant revegetation will not occur in some cases for up to ten years following spoil placement such as along the Mississippi River.

After hydraulic dredge spoil has been placed in a containment area, the carriage water may require disposal if evaporation/infiltration can't handle the volume. Typically, this water is returned to the lake or stream from which the material has been dredged. Returned water may contain substantial amounts of suspended solids, heavy metals, pesticides and hydrocarbon residuals (oil and grease). The nature of the returned water relates to the dredged material's physical and chemical characteristics and how the spoil disposal areas is operated. Consider how carriage water return may affect the receiving water. Monitoring and reporting of these discharges may be required pursuant to the Wisconsin Pollutant Discharge System requirements. Additional problems that may have to be considered include seepage control, contaminant transfer to the external environment by wildlife, surface drainage control and aesthetic aspects. Table 2 summarizes some of the potential effects of dredging and dredged material disposal.

Disposal of dredged material must be accomplished in conformance local zoning ordinances, section 404(+) and solid waste disposal regulations. A permit is not required for U.S. Army Corps of Engineer maintenance dredging projects although the disposal area may require solid waste approval pursuant to S. 144.04, Wis. Stats., and NR 180, Wis. Adm. Code.

Chapter NR 180, Wis. Adm. Code, establishes guidelines and procedures to be followed in dealing with dredge spoil and the interaction between the solid waste and water management program.

NR 180.13(2)(b)(4) indicates that all dredge spoil disposal sites are exempt from solid waste regulations except, (1) sites where more than 3,000 cubic yards of dredge spoil taken from Lake Michigan, Lake Superior, the Wisconsin River, the Fox River, or the Mississippi River are disposed, or (2) sites where dredge spoil taken from inland lakes treated with arsenic are disposed. This same section includes a catch-all provision that would allow the Department to regulate disposal sites that might otherwise be exempt if we make a determination that such disposal might pollute ground or surface waters. This catch-all provision should be used only for its intended purpose, that is to allow us to regulate a site that is otherwise exempt where the Department is fully aware of real or potential problems. It should not be used as a decision criteria for nonexempt sites or as a reason to subject sites with no known problems to further scrutiny or delay.

In addition, NR 180.13(2)(c) provides the Department with the ability to exempt those sites regulated under NR 180.13(2)(c) provides the Department with the ability to exempt those sites regulated under NR 180.13(2)(b)(4) as indicated above if we determine that the disposal of the dredge spoil will not result in environmental pollution. Under no circumstances, however, can disposal take place in wetlands, critical habitat areas, or areas where surface or groundwater pollution may occur.

Remember that except for that category of projects that are exempt from the jurisdiction of the solid waste program, all projects should be assumed to require solid waste approval and licensing and applicants would be notified accordingly. This is particularly important because of the relatively lengthy process involved in gaining solid waste approval. We should not be overly optimistic with applicants that exemptions or quick approval can be gained. To do so only continues to magnify the problems of crisis management. Only after review of specific information on a project, should a determination be made whether any waivers or exemptions are warranted.

The review procedure to be followed should insure that the District Water Management Coordinator and the District Solid Waste Coordinator discuss each dredging project application to determine whether the project is exempted by the administrative code. If it is not automatically exempted, the Solid Waste Coordinator should advise the Water Management Coordinator what information will be requested of the applicant to allow further review of the project.

### ***Special Considerations for Dredging Permits***

#### **1. In-Water Concerns**

When a dredging project is underway, a variety of physical changes occur within the waterway itself. Since a dredging permit or contract must contain a finding that no adverse effects on water quality will result, we must consider how to minimize adverse effects within the waterway.

Properly selected and operated dredging equipment and turbidity curtains can limit the amount of turbidity a dredging project generates. The hydraulic cutterhead dredge generates the least amount of turbidity. With a variable-speed cutterhead, a low speed must be used to remove loose or flocculent material, while a fast speed is needed to remove granular material or stiff clay. Mechanical dredging equipment generally increases turbidity substantially adjacent to the dredge.

Turbidity curtains may be deployed to limit the amount of suspended material leaving the immediate vicinity of the dredge. One method is to surround the dredge itself by a turbidity curtain. The turbidity curtain should extend down to at least the depth of light penetration. While such curtains rarely contain all the suspended material, they can prevent transportation within the water column and confine material movement to a "mud flow" along the bottom. This limits any effects such material in the water column may have to the area inside the turbidity curtain. In streams, dredging should be timed to coincide with periods of normal or low flow when using turbidity curtains. Experience has shown that turbidity curtains have little value in a stream when the average velocity exceeds one foot per second. Without turbidity curtains, we may encourage dredging during a higher flow period to better dilute suspended materials and keep downstream effects to a minimum. Other means of controlling turbidity such as booms or cofferdams may be considered but their adverse effects may outweigh their usefulness.

We should consider how dredging will reshape the contour of the bed of the waterway. The dredging should not leave an area containing substantial drop-offs. Drop-offs in an area near shore may constitute a safety hazard. The area should be left in a condition that minimizes the need for future maintenance dredging. When working in river estuaries, we should estimate the stream's sediment load to determine whether frequent maintenance dredging will be needed to maintain a specific depth.

#### **2. Dredged Material Disposal Concerns**

A number of options exist for the disposal of dredged material. This discussion is divided into brief statements regarding various options.



1. On-land disposal: The encouragement of on-land disposal is the continuing and paramount Department policy for dredge material disposal. This policy has been recently reflected in Chapter NR 347, Wisconsin Administrative Code. In general, we encourage disposal of dredged material on land in a manner which allows the economic reuse of the material in ways which are environmentally acceptable. The use of other than on-land alternatives requires additional justification. This would include a discussion of need, available alternatives, feasibility, and likely environmental consequences. We should recall that navigable waters are held in trust for all the public and that an in-water disposal option should result in overall public benefit (or at least in no substantial harm).
2. Confined disposal facilities (CDF's): Confined disposal facilities have been approved by two different mechanisms in the past. First, where the facility has not been immediately adjacent to the existing shoreline, it has typically been approved by means of legislative lakebed grant. Alternatively, where the facility has been immediately adjacent to the shoreline and where other statutory criteria have been met, bulkhead lines in combination with submerged lands leases have been used to approve disposal facilities. Past practice has been to not authorize these facilities as structures under Section 30.12, because the ultimate use of the facility is typically a piece of land on which some type of development will occur. Approval of the creation of land is not appropriate under either Sections 30.12 or 30.11. The creation of land for specific purposes is permissible when a submerged lands lease under Section 24.39 is also involved.

It is expected that the Department will continue its past practice of approval of confined disposal facilities by either of the identified mechanisms in circumstances where it is environmentally acceptable and where the appropriate requirements are met.

3. Industrial port development and marina construction: Facilities of these types have been approved in the past using either Section 30.12, Section 30.11, or the combination of bulkhead line and submerged lands lease, as appropriate. We expect that past practice would continue into the future.
4. Beach nourishment: For the purpose of this discussion, "beach nourishment" means the addition of material to a beach to prevent or reduce erosion or to help replace material lost to erosion.

Beach nourishment may be approvable pursuant to the following strict criteria by using a bulkhead line alone or a combination of bulkhead line and submerged lands lease. First, there would have to be a demonstrated need for the beach nourishment project and the material would have to be chemically and physically suitable for such a nourishment project. Secondly, the material would have to be placed sufficiently close to shore to provide assurance that it would perform the beneficial function of "nourishing" the beach.

Material cannot be placed beyond that depth where a substantial majority of it can be expected to achieve "beach nourishment." Because of specific requirements in section 24.39, Wis. Stats., the area of the beach which is of public recreational value must be benefited. This may or may not be the same as the full extent of the beach as a landform. The depth limit will vary from site to site based on the material's physical characteristics, offshore contours, and wave and current patterns. No arbitrary maximum depth can be given; however, the closer into the shore the material is placed, the more likely the standards of sections 24.39 and 30.11 can be met.

Because of the variability and complexity of "beach nourishment" as a practice, we will ordinarily request the applicant or sponsor to provide an opinion by a recognized expert on the feasibility of the proposal. This opinion will be evaluated and its conclusions, if technically sound, will be used by the Department in reaching a decision on whether the proposal meets applicable standards.

Two demonstration projects of beach nourishment are being authorized to allow an empirical study on whether the above criteria can be met. The results of these demonstration projects will be used to reevaluate the acceptability of this alternative for dredged material disposal.

5. Island creation: In general, the creation of islands cannot be authorized by the Department under existing statutory restrictions. However, in limited circumstances, the combination of bulkhead line and submerged land lease would appear to have the flexibility to authorize islands without requiring additional legislation. The island would have to be quite close to the existing shoreline of the mainland although it would not be appropriate to circumscribe such an island with a bulkhead line when that bulkhead line would cross an area which supports significant navigation use. Also, riparian ownership issues and other criteria contained in Section 24.39(4) would have to be met before an island could be authorized in this matter.

While a submerged lands lease substantially modifies the usual conformance to the shoreline requirement of Section 30.11, it does not, in our judgment, totally eliminate it. Our view is that where the area circumscribed by the bulkhead line and the distance of that Line from the shore becomes clearly out of proportion to the general configuration of the shoreline itself, the bulkhead line and lease combination would not be appropriate. While it is not possible to clearly define the point at which this would occur, proposals such as that at Interstate Island in the Duluth-Superior Harbor clearly stretch the flexibility of the bulkhead line-lease combination beyond its breaking point.

6. Filling of deep holes: Filling of deep holes could only be allowed by direct legislative authorization. A rare exception to this would be where the hole is so close to the shoreline that a bulkhead line (or bulkhead line and submerged lands lease) could conceivably be used to allow the filling to take place. In the more usual circumstances where the hole is some distance offshore, direct legislative authorization would be needed. The filling of deep holes would typically be preferable to deep water dumping. However, the Department would not support or take a neutral position on legislation to authorize deep hole filling unless it were clearly demonstrated that there was a need to do so, and that the adverse environmental consequences would be minimal.
7. Creation of wetlands: Creation of wetland areas along or immediately adjacent to the existing shoreline could possibly be authorized by use of a bulkhead line with or without an accompanying submerged lands lease. The feasibility of creating such a wetland and the need for that type of wetland habitat in the area would be key factors in judging whether authorization should be granted. If an offshore breakwater structure were needed to prevent erosion of the recently created wetland, it could be authorized under appropriate circumstances by Section 30.12 or could be included in a bulkhead line and submerged lands lease for the entire project. The dredged material may have to be confined by dikes or riprap to ensure its remaining in place long enough for vegetation to stabilize it.
8. Deep water dumping: We believe that deep water dumping is not allowable under existing statutory law. Therefore, direct legislative authorization would be necessary for such a disposal practice to occur. In order for the Department not to oppose such legislation, it would have to be demonstrated that deep water disposal was the only reasonable alternative available. Furthermore, the material itself could not be significantly polluted and could not be placed in an area where adverse environmental consequences could be expected to occur. This disposal technique should be looked at as the last resort and would not be used where any of the other alternatives discussed are judged to be reasonable.

Proposed dredging material disposal practices which have not been authorized routinely in the past (this would include beach nourishment, island creation, deep hole filling, wetland creation, and deep water dumping) should not be allowed to occur without a study demonstrating the need for the particular disposal practice, and properly documenting pre- and post-project conditions and conditions during the operation so

that proper judgments of the environmental impacts of practice can be made. Furthermore, authorization should not occur where the project will not accomplish the desired goals or where serious environmental damage is expected, even though positive proof of that damage could not be provided at the outset.

Several considerations relating to desirable disposal site practices are discussed in the next paragraphs.

We must know the amount of material being removed from the bed of the waterway with a fair degree of accuracy to properly assess the proposed project. Furthermore, disposal area design, particularly in a hydraulic dredging project, is related to the volume of material to be removed. The degree of accuracy needed in estimating the quantity to be removed varies from project to project. The most detailed and accurate method involves using soundings on a grid pattern. Soundings will indicate water depths at the grid intersections. Where practical, soundings are made from the ice due to ease and accuracy of measurement. The volume of material to be removed is the summation of the average distance between existing and proposed elevations at the grid corners times the area of the grid. Many methods of calculating volumes are available, including the standard method of earthwork computation which involves taking successive cross-sections throughout the area to be dredged. The volume of material to be removed between the two adjacent cross-sections is the average of the two cross-sectional areas of material to be removed times the distance between them.

The upland disposal site should be within a reasonable distance (both horizontally and vertically) of the body of water where dredging is occurring. A long discharge pipeline and/or any lift required from the dredging site to the disposal site will decrease the normal efficiency of the dredging operation. If the lift becomes excessive or friction losses in the discharge pipeline become unusually high, booster pumps may be required. In some cases, the discharge pipeline may lead to a temporary dewatering area from which the dredged material will be hauled to the final disposal site. Care should be taken in selecting any such temporary dewatering area to ensure control of leachate and runoff.

The disposal site should be in an environmentally acceptable location. Preferably the site should have road accessibility to encourage reuse of material. The site must be in an area where any leachate resulting from spoil disposal will not contaminate groundwater. An ideal situation occurs where a natural impervious seat lines the bottom of the disposal site.

The inlet pipe to the disposal area should be equipped with baffles or with a 45' elbow to dissipate the energy of the inflow. If separation of several different spoil types is desired (coarse from fine, organic from mineral, usable from unusable), the cell(s) should be fitted with water in advance. Baffles or dikes may be used to prevent short-circuiting (movement of material directly to the outlet without adequate detention time).

The disposal site will typically consist of some type of cellular receiving area in which the suspended solids settle from the carriage water.

A multi-cellular design is better than a single-cell operation. The multiple cells allow considerable flexibility in operation and may enhance the opportunity for material reuse. By properly varying the detention times of the various cells and by placing these cells in a series, various sizes of material can settle out in different cells for reuse. A more common approach is for cells to be used in parallel operation (in other words, each cell is filled in turn while the material in other cells is settling out). This arrangement can be used to insure adequate detention time and removal of suspended solids throughout the dredging operation. With a single-cell operation, excessive capacity must be provided or else suspended solids concentrations will become too high in the discharge effluent since the cell will fill up relatively quickly and detention time will be reduced.

The typical effluent outflow structure from a confined disposal site is an overflow weir. In sandy areas, it may be possible to discharge the effluent directly on the ground where it can percolate with no return to the lake or

stream. In cases where a direct return is necessary, a satisfactory closed or open conduit must be provided. The location of the carriage water return discharge point should be selected carefully to avoid sensitive areas and to provide good dispersion of the effluent at the discharge point.

The effectiveness of the disposal site can be improved by incorporating certain waste treatment techniques. A sand filter may be used at the outlet to trap remaining suspended particles. Flocculating chemicals may be added to enhance settlement and limit the amount of suspended material leaving the site. In some cases, oxygen has been bubbled into the discharge pipeline to reduce the concentrations of heavy metals remaining in solution. Typically, there is enough iron in the water so that introducing oxygen produces a ferric hydroxide precipitate that effectively removes most heavy metals and suspended particles.

## **Final Disposition**

The Reuter decision requires the Department to make a finding that a dredging project will not adversely affect water quality or increase water pollution. A finding should also be made that the proposed dredging project will not cause environmental pollution as defined in subsection 144.30(9), Wis. Stats. It is also clearly necessary that a finding be made that any contract is consistent with public rights and that any permit is consistent with the public interest in the water involved.

In the case of noncommercial dredging contracts, performance or surety bonds may be required. A performance or surety bond is required for commercial removal projects. The bonding requirement is found within Chapter NR 346, Wis. Adm. Code. The purpose of the bond is to insure that the work will be properly completed. If the contractor defaults or is otherwise unable to complete the project, sufficient money should be available from the bond for the Department to complete the work or restore the area to a satisfactory condition. In cases where the project is very small or where no undesirable effect will result from a partially completed project, a performance bond is not necessary. Where a bond is required, the amount of the bond should equal the estimated project cost or the cost of restoring the site. Program guidance is being developed.

Another general requirement of contract law is the "nondiscrimination clause." The Department, as a contracting agent, must include a nondiscrimination clause in any dredging contract. The required wording is found in s. 16.765(2), Wis. Stats.

Compensation is required for material removed under a dredging contract because the state as trustee, must receive reasonable payment for material removed (such compensation is not required where a municipality enters into a contract with the State and where the material will be used for public purpose and not for resale). The amount of compensation is computed according to Chapter NR 346, Wis. Adm. Code.

### *Special Cases*

#### **1. Maintaining Dredging**

In cases where a dredging project must be repeated at regular intervals to maintain design dimensions we may issue a contract or permit which covers more than one removal operation. Since the law limits dredging contracts to a period of five years any successive maintenance dredging operations required for a project may be authorized for the five-year period in the contract. Because of the five year limit on contracts and constantly changing environmental concerns and possible changes in site conditions, we should not issue maintenance dredging permits for more than a five-year period. Any contract or permit should indicate that the Department retains jurisdiction to modify the dredging activity or to stop the work if undesirable effects occur.

## 2. "Treasure-hunting" or "Gold-dredge" Operations

For a number of years, "treasure-hunting" dredge operators have retrieved valuable objects from the beds of navigable waterways. The typical salvage operation takes place in areas of concentrated human activity such as public beaches, and consists of removing bed material, sorting out valuable objects, and redepositing the remaining bed material using a small portable "gold mining" suction dredge. See s. 27.012, Wis. Stats., for guidance on ownership of salvaged material.

In the strictest definition, such activities would constitute a dredging operation. However, past agency practices has been to not require formal permits for "treasure-hunting." Anyone interested in treasure hunting operations should be required to identify the area to be worked and secure an approval letter from the Department. Certain conditions such as requiring the person to remove hazardous and undesirable materials (broken glass, cans, etc.) may be included in the approval.

It is important that the bed material removed from the take not be redeposited in an environmentally sensitive area although this type of operation usually does not substantially recontour the lake or stream bed. Because these operations usually take place in beach areas, the material removed is usually sandy and will not travel far from the actual site. In some cases, we may require some type of turbidity screen or restrict operation to times when turbidity is not a serious concern.

## 3. Trench Crossings

The Department requires a dredging permit or contract where a utility line or pipeline will be placed in a trench beneath the bed of a stream or lake. Keep in mind that temporary deposits of dredged material below the ordinary high-water mark of a body of water are not allowed under s. 30.12, Wis. Stats., so dredged material must be removed from the waterway.

The major difficulty occurs in replacing the bed condition upon completion. Typical requirements trench with suitable material (generally sand or gravel) and establishing the same elevation on the backfilled trench as the surrounding take or stream bed. In some cases, concrete has been used as a backfill. One problem in using such nonerodable material is that it might become a high point on the stream bed. This in turn could lead to silt deposition upstream of the raised trench and stream bed scouring immediately downstream from it.

## 4. Utility Crossings

In general, public utilities, are authorized in s. 182.017, Wis. Stats., to place structures used to transmit heat, light, and power upon the bed of navigable water. The exemption contained in s.182.017, however, does not apply to dredging under s. 30.20. Consequently, placing a utility pipeline or cable directly on top of a stream or lake bed would not require a permit under s. 30.12 but placing the cable or pipeline below the stream or lake bed requires a dredging permit or contract if placement actually requires dredging.

In the case of most buried cables, vibratory plows are used and a minimal amount of material is actually displaced from the lake or stream bed. In these cases, the Department has not required permits. The applicant applies for authority on Form 3500-54, Waterway Cable Crossing, and permission is given provided reasonable precautions are taken to prevent erosion and siltation. This practice should continue in the future.

Another concern which has been raised is the possible disorienting affect on fish and wildlife caused by the magnetic field surrounding the buried electrical cable. White insufficient information is available to

prove such an effect and argue against buried cables, Department personnel should be aware of this possible problem.

## Permit Monitoring

### 1. During the Dredging Operations

- A. In-water Effects: The most obvious effect during a dredging operation is the turbidity generated at the dredge. Additional turbidity may result from leaks in the discharge pipeline in hydraulic dredging projects or at the point where discharge effluent water is returned. Every reasonable effort should be made to minimize the amount of turbidity while the dredge is in operation. The higher the percentage of loosened material the dredge captures, the more efficient the dredging operation and the lower the amount of turbidity generated.

If excessive turbidity is present the cutterhead of a hydraulic dredge may be operating at an improper speed. Any leaks in the discharge pipeline may cause turbidity. Such leaks should be corrected as they reduce operational efficiency and may cause turbidity. If a turbidity curtain is in use and excessive suspended material is observed outside the curtain, it may be necessary to lower the sides of the curtain or obtain a curtain with a greater depth. If a current is present, the curtain may balloon and rise to the surface. Using heavier anchor weights in the bottom of the curtain may help prevent this. However, it may also be necessary to cease dredging operations until the current has reduced to a workable level (generally around one foot per second).

- B. Characteristics of the disposal site: Disposal site operation should be checked periodically to insure that suspended solids are being properly removed. If a multi-cell arrangement is in use, the relative change in turbidity between successive cells may indicate the effectiveness of the operation. Also, samples of water at the outflow points could be taken and analyzed. A general check should also be made to determine whether the disposal operation is creating any nuisance conditions (odor or insect).

If dredged material is being rehandled between the point of discharge and the ultimate disposal site, a check should be made to insure that material losses are not substantial at the rehandling point or in route to the final disposal site.

- C. Discharge effluent return: Characteristics of the discharge effluent should be checked periodically. The permit or contract should require sampling on a regular basis to insure conformance with water quality requirements. Visual inspection can be made of the discharge effluent as a rough check on removal of suspended material.

### 2. After Completion of Operations

- A. Checking Dimensions: Many permits and contracts require a map showing the configuration of the dredged area after project completion. We can make spot checks by taking random soundings and comparing them with the permit requirements and any map which has been submitted. It may be desirable to make such a spot check to insure that the map was developed properly.
- B. Restoration of the Disposal Site: We are concerned that disposal areas be revegetated or otherwise stabilized. A disposal site's ability to become revegetated depends on the chemical and physical composition of the dredged material. In many cases, toxic substances may be present that would inhibit or prevent vegetation from growing directly on the dredge spoil. In such cases, a layer of

topsoil should be placed over the dredge spoil after dewatering and settlement. This layer of topsoil can then be seeded with appropriate native vegetation or grasses for stabilization purposes.

Final contouring of the site for runoff control also should be considered to minimize the likelihood of additional leachate from the dredged material. Future uses of the area should be consistent with the dredged material's capabilities to resist erosion, provide foundation support, and develop a vegetation cover.

When the removal and reuse of dredged material is anticipated over an extended time period, the permittee should be required to take steps to prevent erosion, noise and dust, and to provide a visual screen from surrounding areas.

## **References**

A variety of publications are available on the technical aspects of dredging operations. Technical Bulletins 46 (1970) and 75 (1974) are examples. Technical Bulletin 46, "Inland Lake Dredging Evaluation," contains fairly detailed information on mechanical and hydraulic dredging techniques. Technical Bulletin 75, "Surveys of Lake Rehabilitation Techniques and Experiences," provides a general look at dredging in the context of lake renewal as well as specific examples of dredging projects.

Figure 1  
Dredging Project Information  
Requirement Procedure  
[Flow chart image appears here]

Comments on the Flow Chart

A. Additional screening of projects: Each project needs to be screened to determine which statutory approvals are needed in addition to a s. 30.20 permit or contract. These additional items are:

1. Is the project exempt from solid waste licensing (meets criteria under MR 180.13(2)(b)4)? If exempt, MR 347.08 does not apply.
2. Does the project contain a treatment facility? If not, NR 347.11 does not apply (we may want groundwater data but will not need the other items specified in 347.11).
3. Does the project meet the criteria for a general WPDES permit? If so, NR 347.09 does not apply.

B. Description of "Cases" I through VIII

The flow chart illustrates the two "special" types of dredging projects whose informational requirements are likely to be predictable in advance.

1. Projects involving toxic and hazardous substances or PCB's: Except for the limited exemption allowed if the dredging is mechanical, it is likely that the full range of other information spelled out in NR 347 will be required.
2. Mechanical dredging of under 3000 cubic yards of uncontaminated sediment: limited data will be required here. Additional information could be requested when we suspect a problem or if there will be a treatment facility and/or an individual WPDES permit is required. The intent is to only request such additional information when we expect to be unable to make a finding that the project will not cause environmental pollution.

The other possible combinations of information needs are dependent on a variety of factors and cannot be spelled out so briefly. The eight variations are described in Table I below. In all cases, NR 347.09, and 347.11 may or may not apply, depending on the specific facts.



**Table I**  
NR 347 Informational Requirements

<u>Case</u>	<u>Preliminary*</u> <u>Information</u> <u>(347.05(2))</u>	<u>Exemptions per</u> <u>NR 347.05(5)(b)</u>	<u>Additional</u> <u>Information</u> <u>per NR 347.05(4)</u>	<u>Exemption per</u> <u>NR 347.05(5)(a)</u>	<u>NR</u> <u>347.08</u>	<u>Exempt From</u> <u>NR</u> <u>347.09</u>	<u>NR</u> <u>347.11</u>
I	yes	no	no	no	maybe	maybe	maybe
II	yes	no	no	yes			
III	yes	no	yes	no			
IV	yes	no	yes	yes			
V	yes	yes	no	no			
VI	yes	yes	no	yes			
VII	yes	yes	yes	no			
VIII	yes	yes	yes	yes	maybe	maybe	maybe

\*Require sediment sampling/analysis if contaminated sediments are known or suspected to be involved.

[Table 2 appears here, Summary of the potential environmental effects of dredging and dredged material disposal and their causes, and the major factors contributing to the severity of the effects]

**CORRESPONDENCE/ MEMORANDUM****STATE OF WISCONSIN**

DATE: January 2, 1981

TO: District Directors

FROM: George E. Meyer

SUBJECT: Chapter NR 345, Wisconsin Administrative Code, Program Guidance

The following comments, arranged according to the sections of Chapter NR 345, Wis. Adm. Code, are intended to assist District personnel in implementing that rule by providing direction and details for staff use. They do not constitute standards or mandatory procedures because they are not a part of the rule.

1. Purpose (NR 345.01)

The purpose of the rule is to establish procedures for dredging permit (not contract) application processing and for emergency dredging plan approval either before or after the emergency arises.

2. Applicability (NR 345.02)

The rule applies to all dredging projects for which permits are required or for which emergency dredging plan approval may be obtained. The plan approval procedure will be somewhat different from that followed in processing permits. The emergency dredging plan approval process applies only to ditches draining agricultural lands which are currently being used for crop production.

3. Definitions (NR 345.03)

The following is intended to provide additional information and direction for staff to use in administering NR 345.

- A. "Bed materials" means all earth, muck, sands and gravels, clays, marl, stones and boulders lying below the ordinary high water mark. (The full definition is found in Section NR 346.03(2), Wis. Adm. Code).
- B. "Currently used for crop production" means the land has a cultivated crop which has been planted, is growing, or is being harvested.
- C. "Drainage ditch" means a waterway of regular alignment, cross-section and bottom slope which was created or modified to provide more effective drainage of land than is allowed by natural surface and ground water drainage features.
- D. "Emergency" means a condition created by an unexpected, sudden occurrence which threatens the growth or harvest of a crop, and does not include situations resulting from gradual changes in drainage efficiency. As an example, a major accumulation of silt after a flood event would create an emergency while the growth of vegetation, which occurs gradually, would not.
- E. "Waterway" includes all streams and ditches with defined bed and banks, and a flow (the flow need not be permanent, however, it should continue for some period after direct surface runoff from an individual storm has ceased). Navigability is not a requirement nor does it matter whether or not the waterway is artificial.

4. Procedure (NR 345.05)

A. Routine (non-emergency) dredging

- 1) Navigable Waters - Standard application required
  - a) Maintenance dredging and utility trench crossings: The investigation must be properly documented by Form 3500-23. The permit may be granted or denied immediately since no assessment (form 1600-1) is required. A short form (self-carbon) for grant or denial will be developed soon. Until then, the long form will be used.
  - b) Other dredging: Form 3500-23 will be used to document the investigation. The permit cannot be granted or denied immediately because an environmental assessment (form 1600-1) is required. A short form (self-carbon) for grant or denial will be developed soon. Until then, the long form will be used.
- 2) Nonnavigable Waters - The standard application will be used until another form is developed. The minimum amount of information to describe the project is that specified in NR 345.06(1) for "pre-approval" of emergency dredging plans. A short form (self-carbon) for permit grant or denial will be developed soon. Until then, the long form will have to be used. The permit can be granted or denied immediately unless the project involves draining or filling of wetlands (in that case, an environmental assessment is required and the permit cannot be granted or denied until the assessment process is complete.) Form 3500-23 will be used to document the investigation.

B. Emergency Dredging - Only applies to "sudden natural closures of drainage ditches draining agricultural lands currently used for crop production." This would always be maintenance dredging required to restore a pre-existing drainage ditch capability and would never involve the digging of new drainage ditches or the enlargement of existing drainage ditches beyond their pre-existing capacity.

- 1) Pre-approval of plans - Plans will be submitted clearly showing the information specified in NR 345.06(1). These plans along with the completed standard application form (minus attachments), will be considered a complete application. The approval or disapproval of plans will be a permit (or denial) using a short form (self-carbon). The standard form may be used until the short form is available. An environmental assessment (Form 1600-1) is not required. The investigation should be documented by Form 3500-23. The approval should contain a condition that the Department must be notified before dredging is completed.
- 2) "After the fact" approval - The applicant must contact the Department before dredging. The WMS or WMC should ask enough questions to be reasonably assured that there is a legitimate emergency. The conversation should be fully documented. If there is doubt about the "emergency," an immediate inspection should be made.

The actual approval should be considered an after-the-fact approval of the previous dredging and a pre-approval of future emergency dredging and should be handled procedurally the same as pre-approval of plans.

### C. Further Considerations

- 1) Wetlands - If a proposed dredging project will adversely affect a wetland, the permit may be denied immediately but should not be issued immediately. Decisions which involve adverse wetland impacts must be fully documented.
- 2) Scope of dredging projects - To be considered a maintenance dredging project (either "routine" or "emergency"), a proposal is limited to reestablishing the original dimensions of the waterway. An increase in width or depth would be considered new dredging.
- 3) Emergencies - If an inspector determines that "emergency dredging" is proceeding under non-emergency conditions (not due to a sudden closure of a ditch draining agricultural lands currently used for crop production), the inspector should advise the contractor and landowner to cease dredging. Appropriate enforcement action should be considered. If an application is submitted, it will be treated as a request for non-emergency dredging authorization.

### 5. Standards for grant or denial

Standards applied in implementing this rule are found in s. 30.20(2)(c), Statutes. The Department may issue permits or approvals when consistent with the public interest in the water involved. When a wetland will be adversely affected, the decision must be made consistent with s. NR 1.95, Wisconsin Administration Code. In applying NR 1.95, staff must recognize that the rule requires professional judgement based on the availability of reasonable alternatives and the value of the wetland. If it is reasonable to do so, actions adversely affecting wetlands are to be avoided. Denial of requested authority is an alternative which must be considered, particularly where substantial adverse effects on wetlands would result if a permit were granted. If avoidance is not reasonable, adverse impacts are to be minimized. Ordinarily, maintenance of existing agricultural ditches in shoreland areas will be authorized, consistent with the intent of NR 115.

All types of authority should specify devices or techniques which will be used to prevent downstream sedimentation and turbidity. These might include sumps, silt screens, straw bale filters, or requiring dredging in the downstream direction. Long term provisions could include sloping back the ditch banks, grading material berms to within one foot of the natural ground level with a slope away from the ditch, providing a sodded area one rod wide on each side of the ditch, revegetation and maintenance of grassy vegetation on the ditch banks and berms, and keeping trees and brush off of the ditch bands, berms and buffer strips.

Questions on the implementation of NR 345 should be addressed to Bob Roden at (608)266-8034.

cc: R. Roden - WRZ/5  
J. Kurtz - LEG/5  
R. Knitter - WRZ/5

## POSITION STATEMENT ON NR 345 (DWYER RULES) IMPLEMENTATION

1. Q. What ditches are now under Department jurisdiction?
  - A. With the publication of NR 345 on August 1, 1980, all ditches with defined bed and banks, and a flow come under the permit requirements of Section 30.20, Statutes. The flow need not be permanent (i.e. intermittent ditches are considered to have a flow). However, it should continue for some period after direct surface runoff from an individual storm has ceased. Navigability is not an issue nor does it matter whether or not the ditch is entirely artificial. Removal of bed material from any such ditch requires a permit from the Department.
2. Q. Where we do take jurisdiction, what standards are used to grant or deny permits?
  - A. The specific standards are found in s. 30.20(2)(c), Statutes. The Department may issue permits when consistent with the public interest in the water involved. When a wetland will be adversely affected, the decision must be made consistent with s. NR 1.95, Wisconsin Administrative Code. In applying NR 1.95, staff must recognize that the rule requires professional judgment based on the availability of reasonable alternatives and the value of the wetlands. If it is reasonable to do so, actions adversely affecting wetlands are to be avoided. Denial of requested authority is an alternative which must be considered, particularly where substantial adverse effects on wetlands would result if a permit were granted. If avoidance is not reasonable, adverse impacts are to be minimized by careful design and construction practices. Staff should be guided by Chapter NR 115 when considering the authorization of maintenance of existing agricultural ditches in shoreland areas. Ordinarily, such authorization will be granted, consistent with the intent of NR 115.

Permit No. WI-0055573-1

General Permit Regulating Wastewater Discharges Under  
the Wisconsin Pollutant Discharge Elimination System

In accordance with Chapter 147, Wisconsin Statutes and the effluent limitations, monitoring requirements and other conditions contained in this permit, any

dredging operation

located in the State of Wisconsin having wastewater discharges meeting the applicability criteria listed in Part I is permitted to discharge these wastewaters to

groundwaters of the state indirectly via land surface seepage or absorption systems only.

This permit shall become effective on the date of signature and shall expire on September 30, 1986.

L. F. Wible, P.E.

Administrator

Division of Environmental Standards

Dated April 26, 1982

Part I.

A. Applicability Criteria

All discharges from any facility subject to this permit shall meet all applicability criteria listed below. Persons wishing to discharge to waters of the state wastewaters not meeting all of these applicability requirements shall either meet the applicability requirements of another general permit or shall apply for and receive an individual WPDES permit under Chapter 147, Statutes.

1. This permit is applicable to discharges from dredging of uncontaminated sediments, or mildly polluted sediments not requiring specialized environmental controls, where carriage water and interstitial water is disposed of via indirect seepage to groundwater, with no direct discharge or return flow to surface waters.
2. Dredging operations shall be performed in accordance with Chapter NR 347, Wis. Admin. Code, "Regulation of Dredging Projects".
3. Wastewater disposal facilities shall have sufficient capacity to contain the wastewater discharge and any precipitation which falls within or flows into the area of the disposal system.
4. Accumulated solids shall be managed or removed to maintain the hydraulic capacity and absorptive capability of the disposal system.
5. Where disposal facilities are contained by dikes or berms, no above ground leakage is allowed on the outer surface of such dikes or berms.
6. No hazardous waste or toxic substances shall be present in the wastewater stream.
7. Any work performed below, or within 500 feet of the ordinary high water mark of navigable waters, in wetland areas, or within areas subject to local floodplain and shoreland regulations, must conform to all such county or local ordinances. Also, all applicable state permits and/or contracts required by Chapters 30, 31, and 87, Stats. (or Wisconsin Administrative Codes adopted under these laws), and federal permits must be obtained as necessary.

B. Monitoring and Reporting

1. No monitoring of these discharges is required.
2. Although no routine monitoring or reporting is required for discharges covered by this permit, there may be instances when special reporting may be required by the applicability criteria listed above, or by the general conditions contained in Part II. Such reports would be due, for example, if a change in the discharge were anticipated. These reports shall be submitted the:

Wisconsin Department of Natural Resources  
WPDES Permit Section  
P.O. Box 7921  
Madison, Wisconsin 53707

3. Reports required by this permit shall be signed.
  - (a) for a corporation by a principal executive officer of at least the level of Vice President of his duly authorized representative having overall responsibility for the operation of the facility for which this permit is issued,
  - (b) for a partnership by a general partner, and
  - (c) for a sole proprietorship by the proprietor.



Part II.  
GENERAL CONDITIONS

1. Compliance

All discharges authorized herein shall be consistent with the terms and conditions of this permit. The discharge of any pollutant identified in this permit more frequently than or at level in excess of that authorized shall constitute a violation of the permit.

2. Adverse Impact

The permittee shall take all reasonable steps to minimize any adverse impact on waters of the State resulting from noncompliance with any effluent limitations specified in this permit, including such special or additional monitoring as may be requested by the Department or may be necessary to determine the nature and impact of the noncomplying discharge.

3. Removed Substances

Solids, sludges, filter backwash or other pollutants removed from or resulting from treatment or control of wastewaters or intake waters shall be stored and disposed of in a manner such as to prevent any pollutant from such materials from entering the waters of the State. Land disposal of treatment plant solids and sludges shall be either at a site or operation Licensed by the Department under Chapter NR 180, Wisconsin Administrative Code, or in accordance with a sludge disposal plan approved by the Department.

4. Right of Entry

The permittee shall allow authorized representatives of the Department of Natural Resources, and the Administrator of the United States Environmental Protection Agency or his authorized representatives, upon the presentation of credentials:

- a. To enter upon the permittee's premises where an effluent source is located or in which any records are required to be kept under the terms and conditions of this permit; and
- b. At reasonable times to have access to and copy any records required to be kept under the terms and conditions of this permit; to inspect any monitoring equipment or monitoring method required in this permit; and to sample any wastewaters.

5. Voluntary Withdrawal

After notice and opportunity for a hearing, as provided in Section 147.03, Wisconsin Statutes, the Department may withdraw the point source from coverage by this permit and issue a separate permit for that source.

6. Withdrawal

After notice and opportunity for a hearing, as provided in Section 147.03, Wisconsin Statutes, the Department may withdraw a point source from coverage of this permit and issue a separate permit for that source if:

- a. The point source is a significant contributor of pollution;
- b. The point source is not in compliance with the terms and conditions and applicability requirements of this permit;

- c. A change occurs in the availability of demonstrated technology or practices for the control or abatement of pollutants from the point source;
  - d. Effluent limitations or standards are promulgated for the point source;
  - e. A water quality management plan containing requirements applicable to the point source is approved.
7. Toxic Pollutants  
Nothing in this permit shall be construed to authorize the discharge of any toxic pollutant or combination of pollutants in amounts or concentrations which exceed any applicable toxic effluent standard or prohibition, including any schedule of compliance specified in any such effluent standard or prohibition, promulgated under Section 147.07(1), Wisconsin Statutes.
- If an applicable toxic effluent standard or prohibition, including any schedule of compliance specified in such effluent standard or prohibition, is promulgated under Section 147.07(1), Wisconsin Statutes, for a toxic pollutant or combination of pollutants which is present in the discharge, this permit shall be revised or modified in accordance with the toxic effluent standard or prohibition.
8. Civil and Criminal Liability  
Except as provided in permit conditions on "Bypassing" (Part 11, 16) and "Power Failures" (Part 11, 17), nothing in this permit shall be construed to relieve the permittee from civil or criminal penalties under Section 147.21, Wisconsin Statutes, for noncompliance with the terms and conditions of this permit.
9. State Laws  
Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any other applicable State law or regulation.
10. Property Rights  
The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of Federal, State or local laws or regulations.
11. Severability  
The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected hereby.
12. Confidential Information  
Except for data determined to be confidential under Section 147.08(2)(c), Wisconsin Statutes, all monitoring reports required by this permit shall be available for public inspection at the headquarters of the Department of Natural Resources. Knowingly making any false statement on any such report may result in the imposition of criminal penalties as provided for in Section 147.21, Wisconsin Statutes.
13. Change in Discharge  
Any anticipated facility expansions, production increases or process modifications which will result in new, different or increased discharges of pollutants which will result in the permittee no longer complying with all terms, conditions and limitations of this permit shall be reported to the Department at least 180 days before such expansions, production increases or process modifications occur.

14. Noncompliance Notification

If, for any reason, the permittee does not comply with or will be unable to comply with any condition or requirement of this permit, he shall provide the Department of Natural Resources in writing within five (5) days of becoming aware of such condition, with the following information.

- a. A description of the cause of the noncompliance; and
- b. An identification of the period of noncompliance, including exact dates and times; or, if continuing, the anticipated time the noncompliance is expected to continue, and a description of the steps being taken to reduce, eliminate and prevent recurrence of the noncompliance.

15. Facilities Operation

The permittee shall at all times maintain in good working order and operate as efficiently as possible all treatment or control facilities or systems installed or used by the permittee to achieve compliance with the terms and conditions of this permit.

16. Bypassing

The diversion or bypass of any discharge at a treatment works or land disposal system to a surface water of the state is prohibited. In the event of a bypass the permittee shall immediately notify the Department District Office by telephone. In addition, the permittee shall notify the Department of Natural Resources, WPDES Permit Section of each diversion or bypass by Letter, within 72 hours.

17. Power Failures

In order to maintain compliance with any condition or requirement of this permit in the event of the reduction, loss, or failure of one or more of the primary sources of power to the wastewater control facilities, the permittee shall either:

- a. Provide an alternative power source sufficient to operate the wastewater treatment or control facility.
- b. Reduce or otherwise control production and/or all discharges from the facility.

18. Spill Reporting

In the event that a spill or accidental release of any material or substance results in the discharge of pollutants from this facility at a rate or concentration greater than that which is Limited by this permit, the permittee shall within one hour of becoming aware of any such spill or release, notify the Department by telephone at 608/266-3232. At the time of notification, the following information shall be presented:

- a. The name and location of facility and its WPDES Permit number;
- b. The name of the material which was spilled and a list of its chemical constituents;
- c. The estimated time the spill commenced and has or will be stopped;
- d. The name of the receiving water in which the spill occurred or could occur;
- e. The name, title and telephone number of the persons making the notification.

Notification made in accordance with this section does not relieve the permittee of any other noncompliance notification requirements contained in this permit or in Section 311 of the Federal Water Pollution Control Act (P.O. 92-500), as amended by the Clean Water Act of 1977 (P.L. 95-217).

**CORRESPONDENCE/ MEMORANDUM****STATE OF WISCONSIN**

DATE: March 11, 1983

FILE REF: 3550 (WMC)

TO: District Directors

PMMS Response  
Put in Chapter 120, Water Regulation Handbook

FROM: Robert W. Roden - WZ/5

Distribution: Water Regulation Handbook Holders

SUBJECT: Interpretation of NR 347

Several questions regarding the interpretation of NR 347 have recently arisen. One problem centered around the need for extensive data from applicants for projects in "environmentally sensitive areas." Since this phrase is defined in NR 347 in a broad way, concern was expressed that virtually all projects would require extensive amounts of data before a permit could be issued.

As second problem involves a missing reference in NR 347 and in the flow chart found in figure 1, Chapter 120 of the Water Regulation Handbook.

"Environmentally sensitive area" is defined in NR 347.03(10) as "an area which may be especially susceptible to damage by dredging or the disposal, rehandling or treatment of dredged materials, including, but not limited to: areas within 1,000 feet of a navigable lake, pond or flowage; areas within 300 areas; areas where the department finds that there is a reasonable probability that disposal, rehandling or treatment within such area will have a detrimental effect on surface of groundwater; and areas within 1200 feet of a public or private water supply." We interpret this definition to mean that a proposed disposal site in the floodplain, for example, should be closely examined to determine if the proposed disposal site is "especially susceptible to damage by dredging...." If it appears upon investigation that the site is not especially susceptible to damage, the stringent data requirements normally required for "environmentally susceptible areas" may be waived. The same logic applies to wetland areas, critical habitat areas, etc. The definition should not be interpreted to mean all the areas named are automatically "environmentally susceptible areas" requiring extensive data.

Minimum data requirements for dredging projects are therefore:

1. Projects under 3000 yd<sup>3</sup> of material, disposal in areas not "environmentally sensitive," involving no toxic or hazardous waste:
  - a. Preliminary information required from NR 347.05(2) a-d
  - b. Disposal site information from NR 347.08 required.
  - c. Treatment facility information specified in NR 347.11 (may not be applicable).
  - d. Discharge permit information under NR 347.09 (may not be applicable).

2. Projects over 3000 yd<sup>3</sup> of material, disposal in areas not "environmentally sensitive," involving no toxic or hazardous waste:
  - a. Preliminary information required from NR 347.05(2) a-d.
  - b. At least once core sample is required pursuant to NR 347.07(2)(a)(2). More samples may be required.
  - c. Analysis of the samples is required pursuant to NR 347.07(3).
  - d. Treatment facility information specified in NR 347.11 (may not be applicable).
  - e. Discharge permit information under NR 347.09 (may not be applicable).

There is a typographical error in figure 1, Chapter 120 of the handbook. The second box in the upper left portion of the figure, which reads "Require preliminary information in NR 347.05(2)(e) - (d)" should read "Require preliminary information in NR 347.05(2)(a) - (d)". Also note that Table 1 of Chapter 120 implies that for certain projects no sampling is required. If the project is over 3000 yd<sup>3</sup>, at least one sample will be required pursuant to NR 347.07(2)(a)(2).

NR 347.05(4)(a) contains a reference to NR 347.04(4)(a), which does not exist. The code will be amended later this year to correct this problem (among other). Until that time ignore the reference to a list of waters but not the rest of the subsection.

Reviewed By: Daniel Holzman WZ/5  
Scott Hausmann - WZ/5  
Ed Brick WZ 5  
Bob Roden WZ/5

## CORRESPONDENCE/ MEMORANDUM

STATE OF WISCONSIN

DATE: June 9, 1983

FILE REF: 3500 (WMC)

TO: Greg Pilarski,  
Southeast District Dredging Coordinator

PMMS Response  
Put in: Ch 120, W.R. Handbook

FROM: Robert W. Roden, DTC Chair

Distribution: SED, LMD, NWD, IWW, SW

SUBJECT: Milwaukee Harbor Non-Federal Dredging Projects

You have asked for guidance on the following questions related to Milwaukee Harbor Dredging Projects:

1. Requirements for a WPDES permit for the Milwaukee Confined Disposal Facility (CDF);
2. Control of the use of the Milwaukee CDF and our opportunity to influence use;
3. Application of Chapters NR 180 and 181 to the disposal of dredged materials; and
4. Department jurisdiction under Ch. 30 over Milwaukee Harbor non-federal dredging activities.

### WPDES Permit Requirement

Ken Wiesner and others in the Industrial Wastewater Section said that a discharge permit is required for the Milwaukee CDF. Detroit District Corps of Engineers representatives indicated agreement with that opinion during a discussion of the 1983 maintenance dredging program on January 5, 1983. An application has been received and is being processed. Carl Blabaum has decided that the application will be processed in a normal manner.

### Control of CDF Use

At the January 5, meeting, control of CDF use was discussed. Corps representatives said that the federal authority for CDF construction included a requirement that capacity be provided within the CDF for contract dredgers. Control by the Corps of Engineer is through their Section 10 dredging permit program. They also charge a fee per cubic yard for the placement of material in the CDF. We believe we have an opportunity to participate in those decisions through our review of and comment on Section 10 permit application notices and through the water quality certification process (the Corps has not agreed that 401 certification necessarily gives us that level of input). The Corps of Engineers indicated that they were not interested in having toxic and hazardous wastes disposed of in the Milwaukee CDF.

One further point regarding a use by contract dredgers of the Milwaukee CDF is appropriate. The Corps authority states that the dredged materials can be placed in the CDF from the Milwaukee Harbor and

vicinity. They have not defined the limits of the Milwaukee Harbor "vicinity." You recall in the past that materials dredged from the Port Washington Harbor were placed in the Milwaukee CDF.

### Solid and Hazardous Waste Requirements

We discussed the applicability of Chapter NR 180 and 181 with Dennis Sopcich of the Residuals Management Section. Subject to the six constraints listed in the D. Sopcich memo to P. Didier of 2/25/83, the Bureau of Solid Waste Management has stated that exemptions from NR 180 requirements can be granted on a case-by-case basis for disposal of moderately to heavily polluted, non-hazardous dredged material in CDFS. Those constraints are:

1. Confined disposal facilities were developed by a Congressional directive. The intent of that directive was to prohibit open water disposal of sediment classified as moderately or heavily polluted. As Wisconsin prohibits open water disposal of any material (nonpolluted or otherwise), the Corps of Engineers must also use CDF's for nonpolluted sediments or seek upland sites.
2. The Industrial Wastewater WPDES permit system provides the Department with the ability of requiring the applicant to comply with certain discharge limits. This minimizes the potential for contributing to elevated background surface water concentrations.
3. Disposal within confined disposal facilities should be limited to nonhazardous sediment. Sediment analyses and the elutriate results are submitted with each maintenance dredge submittal thus providing information necessary to make this determination.
4. Sediment disposal within a confined disposal facility should be limited to sediment taken proximate to the confined disposal facility. This would ensure that sediment going to the subject confined disposal facility possesses physical and chemical characteristics indigenous to that area. This sediment would have already migrated throughout the area as a result of being dispersed by wave action and to a lesser degree shipping traffic. This should minimize any potential for added or new environmental impact as the Corps of Engineers will not be introducing any waste foreign to the area. Granted constituents contained therein will be resuspended in the carriage water, however, WPDES design constraints and subsequent discharge limits should minimize impact to the receiving water body.
5. Vertical leaching of constituents sorbed to the sediments or present in solution as part of the pore water will not be any greater than one would expect previous to its removal. Water levels are in a constant state of flux making the constituents sorbed to the sediment mobile at any time.

It could end up that the sediments will be placed above the high-water marker and thus will be less subject to leaching once in the confined disposal facility versus in its natural state.

6. The confined disposal facilities proposed for use are already in-place and subsequently will not present further impact, via construction, to the surrounding environment.

Dennis asked about the testing procedure used for sediment analysis. He has designed a "paper test" based on the actual USEPA toxic extraction procedure (TEP), to approximate the concentration which could occur if all of the constituents of concern were to go into solution. If the material appears hazardous using this mechanism, then the applicant should be requested to perform the actual TEP test. The USEPA tests provide official guidance for sediment analysis.

### Applicability of Ch. 30

Subject to the exemptions in secs. 30.05 and 30.19, Stats., Chapter 30, Stats., applies to Milwaukee Harbor non-federal projects.

Reviewed By:

E. M. Brick  
K. Wiesner  
D. Sopcich  
M. Cain

BR:EB:sm

cc: District Directors - WMCS  
Mike Cain - LE/5  
Dredging Technical Committee



**CORRESPONDENCE/ MEMORANDUM****STATE OF WISCONSIN**

DATE: June 2, 1986

3550

TO: District Directors

(Water Mgt. Coord.)

PMMS Response Insertion: Chapter 3, Floodplain-Shoreland Guidebook and Chapter 120, Water Regulation Handbook

FROM: Robert W. Roden

Distribution: All Water Regulation &amp; Zoning Staff

SUBJECT: Floodplain Zoning Ordinance and Amendment Approvals

Now that Chapter NR 116 has been revised and officially took effect March 1, 1986, we have revised the approval forms for floodplain ordinances and amendments to address some of the changes to the rule. These approvals will note that the rule has changed and where appropriate, alert the community that if they have a dam or dams, the zoning map may not accurately designate floodplains below the dam. We'll be approving the ordinance or amendment, but we may include some conditions depending on the specific ordinance or community involved. Examples of letters to be used for approvals are enclosed.

**I. District Approval of Amendments**

For minor map or text amendments submitted for DNR approval, district floodplain staff should use Glossary 4167(C) attached to approve just the amendment. A notice is included stating Chapter NR 116 has been revised and the remainder of the ordinance may not comply with the revisions. We approved these ordinances in the past and your action now will only approve the amendment. The community is not bound by a condition to upgrade their ordinance by this action.

Pre-1978 ordinances will require upgrading. Others may also require upgrading and conditions to do so. Contact the Bureau staff for guidance as these occur. See Glossary 4167(B) for example.

**II. Bureau Approval of Ordinances**

For new ordinances and ordinances adopted in the past but never approved, Lynn Goldade issues approvals from the Bureau and will determine which conditions must be included which will generally follow these guidelines.

**A. Approval of Flood Studies Without Dam Analyses**

One reason for conditions is that s. NR 116.08(1) requires that where flood studies are complete, areas downstream of dams must be mapped and zoned according to the hazard potential below the dam. We won't require that studies substantially completed by March 1 be revised. For studies just beginning and future studies, we are discussing dam analysis requirements with the Federal Emergency Management Agency. Consequently, for the next few months we will approve ordinances and amendments that adopt studies without dam analyses. These approvals will point out that additional analyses will be needed to accurately zone areas below dams. We will approve these adoptions and

provide notice that after an analysis is completed for the dams the community will have 6 months to adopt the analysis and zone accordingly. This approval will not begin the 10-year time frame for Chapter NR 333 compliance. We have not yet determined when or who will do the studies.

B. Approval of Ordinances Without Studies

For FEMAs Special Conversions or other adoptions not based on a study, s. NR 116.08(2) allows other information to be used for zoning. These ordinance approvals won't require the conditions concerning dams; however the approval will advise the community of the dam zoning requirements. Other conditions may be necessary depending on the content of each ordinance as compared to the revised Ch. NR 116.

III. Approval Orders (explanation of attachments)

Districts should use the attached form Glossary 4167(C) for all Floodplain Zoning Ordinance Amendment approvals issued after March 1, 1986. Approval orders issued by the Bureau will more specifically address changes to NR 116 and copies are attached for your information (Glossary 4167(o) and 4167(B)).

Glossary 4167(o) will be used for ordinances which comply with the revised rule, but dam analyses have not been completed. This alerts the community that in the future if an analysis is completed they will have 6 months to adopt the analysis and zone accordingly. Glossary 4167(B) will be used if older ordinances are submitted for approval which don't comply with all of the provisions of Chapter NR 116. This order gives the community 6 months to upgrade their ordinance based on s. NR 116.05(4) "Ugrading Ordinances". We don't expect many of these once the revised rule has been in effect a while and communities receive current model ordinances for examples.

Reviewed By:

Lynn Z. Goldade  
Larry A. Larson  
Robert W. Watson  
Scott Hausmann  
Mark A. Riebau  
Richard Knitter

Tom Steidl

Carroll D. Besadny,  
Secretary  
BOX 7921  
MADISON, WISCONSIN 53707

[District Amendment Approval]

Glossary 4167(C) Revised 5/29/86 - pg. 29

(1) \_\_\_\_\_

IN REPLY REFER TO: 3550-1  
FP Approval (2) (Community &  
County

(3) (Municipal Clerk)  
\_\_\_\_\_  
\_\_\_\_\_

(4) \_\_\_\_\_:

Re: Approval of (5) (Map or Text) Amendment(s) to the (6) \_\_\_\_\_  
(Co./City/Village of) Floodplain Zoning Ordinance; Approval No.

#### FINDINGS OF FACT

1. On (8) \_\_\_\_\_ the (9) (Co./City/Village of) adopted (10) (Map and/or Text) amendments to the Floodplain Zoning Ordinance by Ordinance number(s) (11) \_\_\_\_\_ following public notice and hearing.
2. The purpose of this amendment is to (12) \_\_\_\_\_.
3. The Department has reviewed this amendment for compliance with minimum standards for floodplain zoning contained in Chapter NR 116, Wisconsin Administrative Code.

#### CONCLUSIONS OF LAW

1. The Department is authorized by s. 87.30, Wis. Stats., and ss. NR 116.21 and NR 116.22, Wis. Adm. Code to review and approve amendments to floodplain zoning ordinances.
2. The (13) (Co./City/Village) has complied with the procedural requirements for adoption of this amendment according to Wisconsin Statutes.
3. This amendment complies with the requirements of Ch. NR 116, Wis. Adm. Code.

### DECISION

The Department approves this amendment.

### NOTICE OF APPEAL RIGHTS

Any person aggrieved by this decision who meets the requirements of s. 227.42, Stats., as renumbered by 1985 Wisconsin Act 182, may seek a contested case hearing by serving a petition for hearing on the Secretary of the Department of Natural Resources within 30 days after this decision is mailed by the Department.

Any person aggrieved by this decision may seek judicial review by serving and filing a petition for judicial review in accordance with the provisions of ss. 227.52 and 227.53, Stats., as renumbered by 1985 Wisconsin Act 182, within 30 days after this decision is mailed by the Department. Any petition for judicial review of this decision shall name the Department of Natural Resources as the respondent.

This notice is provided pursuant to s. 227.48(2), Stats., as renumbered by 1985 Wisconsin Act 182 and should not be construed as an indication that the Department believes that any person has a right to appeal this decision.

Please note that only the specific amendments listed are approved by this action. The remainder of the Floodplain Zoning Ordinance may not comply with all provisions of the revised Chapter NR 116, Wis. Adm. Code, which became effective March 1, 1986.

Successful floodplain management and implementation of these regulations will depend on effective administration and enforcement of the ordinance. Please keep us advised of any problems associated with this administration and let us know when we can be of assistance. (14) (Floodplain Specialist) of the (15) District office at (16) is available to assist you with technical or administrative problems.

STATE OF WISCONSIN DEPARTMENT OF NATURAL RESOURCES  
For the Secretary

By \_\_\_\_\_ Date \_\_\_\_\_  
Robert W. Roden, Director  
Bureau of Water Regulation & Zoning

cc: (17) \_\_\_\_\_ - (18) \_\_\_\_\_ District Office  
Alan Biman -FEMA, Chicago  
Zoning Administrator  
Regional Planning Commission

BEFORE THE  
DEPARTMENT OF NATURAL RESOURCES

Approval of Floodplain Zoning Ordinance

(1) (City/Co./Village of) \_\_\_\_\_ Approval No. 3-F-(2) \_\_\_\_\_

FINDINGS OF FACT

1. On (3) \_\_\_\_\_ the (4) \_\_\_\_\_ adopted a Floodplain Zoning Ordinance following public notice and hearing.
2. The Department has reviewed this ordinance for compliance with minimum standards for floodplain zoning contained in Chapter NR 116, Wisconsin Administrative Code.
3. The Floodplain Zoning Ordinance is not consistent with the provisions of the revised Ch. NR 116, Wis. Adm. Code, which became effective March 1, 1986, in the following respect(s):

Section NR 116.08 requires zoning of ' areas downstream of dams based on the ability of the dam to survive the regional flood. This community has areas which are not currently mapped as floodplains based on the hazard potential of a dam or dam(s) which affect the community. The dam or dams have not been analyzed or inspected for their hazard potential.

CONCLUSIONS OF LAW

1. The Department is authorized by s. 87.30, Wis. Stats., and ss. NR 116.21 and 116.22, Wis. Adm. Code to review and approve floodplain zoning ordinances and amendments.
2. The (5) (Co./City/Village) has complied with the procedural requirements for adoption of this ordinance according to Wisconsin Statutes.
3. This ordinance substantially complies with the requirements of Ch. NR 116, Wis. Adm. Code subject to the conditions of this Approval.
4. The conditions of approval set forth below are necessary to ensure compliance with Ch. NR 116, Wis. Adm. Code.

DECISION

The Department approves the amendment subject to the following conditions:

1. When an analysis is completed for dams affecting the community, changes to the zoning of downstream areas must be adopted within 6 months.
2. There shall be continuous and effective administration and enforcement of this ordinance.
3. Copies of all notices of and decisions on all amendments, special exceptions or conditional uses, and variances affecting floodplain zoning, shall be mailed to the (6) \_\_\_\_\_ District office of the

Department and all amendments must be reviewed and approved by the Department before they become effective.

4. The (7) (Co./City/Village) shall amend the ordinance within six (6) months of the receipt of upgraded flood data, changes in State standards, or to reflect legal precedents or improved technical information and methods.
5. The (8) (Co./City/Village) shall amend the ordinance within six (6) months after receipt of any flood data that becomes available to regulate the floodplains of streams presently not delineated on the floodplain zoning map; or those streams that may come under future jurisdiction.

#### NOTICE OF APPEAL RIGHTS

Any person aggrieved by this decision who meets the requirements of s. 227.42, Stats., as renumbered by 1985 Wisconsin Act 182, may seek a contested case hearing by serving a petition for hearing on the Secretary of the Department of Natural Resources within 30 days after this decision is mailed by the Department.

Any person aggrieved by this decision may seek judicial review by serving and filing a petition for judicial review in accordance with the provisions of ss. 227.52 and 227.53, Stats., as renumbered by 1985 Wisconsin Act 182, within 30 days after this decision is mailed by the Department. Any petition for judicial review of this decision shall name the Department of Natural Resources as the respondent.

This notice is provided pursuant to s. 227.48(2), Stats., as renumbered by 1985 Wisconsin Act 182 and should not be construed as an indication that the Department believes that any person has a right to appeal this decision.

STATE OF WISCONSIN DEPARTMENT OF NATURAL RESOURCES

For the Secretary

By \_\_\_\_\_ Date \_\_\_\_\_

Robert W. Roden, Director  
Bureau of Water Regulation & Zoning

BEFORE THE  
DEPARTMENT OF NATURAL RESOURCES

Approval of Floodplain Zoning Ordinance  
#1 (City/Co/Village of) \_\_\_\_\_

Approval No. 3-F-#2 \_\_\_\_\_

FINDINGS OF FACT

1. On #3 \_\_\_\_\_, the #4 \_\_\_\_\_ Ordinance following public notice and hearing.
2. The Department has reviewed this ordinance for compliance with minimum standards for floodplain zoning contained in Chapter NR 116, Wisconsin Administrative Code.
3. The Floodplain Zoning Ordinance is not consistent with the provisions of the revised Ch. NR 116, Wis. Adm. Code, which became effective March 1, 1986, in the following respects:
  - A. Section 116.13 requires development in the flood fringe to have access to dry land during the regional flood.
  - B. Sections NR 116.13 and NR 116.16 require that all development in floodplain areas be elevated or dry-floodproofed and not occur at elevations below Regional Flood Elevation.
  - C. Section NR 116.15 establishes uniform standards for nonconforming uses and buildings in floodplain areas provided they are not inconsistent with ss. 59.97(10) or 62.23(7)(h), Wis. Stats.
  - D. Section NR 116.20 requires the department to provide analysis assistance for projects not exceeding 5 acres or \$125,000.00.
  - E. Sections NR 116.07 and NR 116.11 include revised standards to be used for hydraulic or hydrologic floodplain studies.
  - F. Chapter NR 116 permits only development which does not cause an obstruction to flood flow or increase in flood height equal to or exceeding 0.01 foot.
  - G. Section NR 116.08 requires zoning of areas downstream of dams based on the ability of the dam to survive the regional flood.
4. The #5 \_\_\_\_\_ has areas which are not currently mapped as floodplains based on the hazard-potential of a dam or dam(s) which affect the community. The dam or dams have not been analyzed or inspected for their hazard potential.

### CONCLUSIONS OF LAW

1. The Department is authorized by s. 87.30, Wis. Stats., and ss. NR 116.21 and 116.22, Wis. Adm. Code to review and approve floodplain zoning ordinances and amendments.
2. The community has complied with the procedural requirements for adoption of this ordinance according to Wisconsin Statutes.
3. This ordinance substantially complies with the requirements of Ch. NR 116, Wis. Adm. Code subject to the conditions of this approval.
4. The conditions of approval set forth below are necessary to ensure compliance with Ch. NR 116, Wis. Adm. Code.

### DECISION

The Department approves this ordinance subject to the following conditions:

1. The (6) \_\_\_\_\_ adopts amendments or revisions of its Floodplain Zoning Ordinance to correct the deficiencies noted in the Findings of Facts No. 3 within six (6) months of this decision.
2. When an analysis is completed for dams affecting the community, changes to the zoning of downstream areas must be adopted within 6 months after receipt of the analysis.
3. There shall be continuous and effective administration and enforcement of this ordinance.
4. Copies of all notices of and decisions on all amendments, special exceptions or conditional uses, and variances, affecting floodplain zoning, shall be mailed to the #7 \_\_\_\_\_ District office of the Department and amendments must be reviewed and approved by the Department before they become effective.
5. The #8 \_\_\_\_\_ shall amend the ordinance within six (6) months of the receipt of upgraded flood data, changes to State standards, or to reflect legal precedents or improved technical information and methods.
6. The #9 \_\_\_\_\_ shall amend the ordinance within six (6) months of receipt of any flood data that becomes available to regulate the floodplains of streams presently not delineated on the floodplain zoning map; or those streams that may come under future jurisdiction.

### NOTICE OF APPEAL RIGHTS

Any person aggrieved by this decision who meets the requirements of s. 227.42, Stats., as renumbered by 1985 Wisconsin Act 182, may seek a contested case hearing by serving a petition for hearing on the Secretary of the Department of Natural Resources within 30 days after this decision was mailed by the Department.

Any person aggrieved by this decision may seek judicial review by serving and filing a petition for judicial review in accordance with the provisions of ss. 227.52 and 227.53, Stats., as renumbered by 1985 Wisconsin Act 182, within 30 days after the decision is mailed by the Department. Any petition for judicial review of this decision shall name the Department of Natural Resources as the respondent.



This notice is provided pursuant to s. 227.48(2), Stats., as renumbered by 1985 Wisconsin Act 182 and should not be construed as an indication that the Department believes that any person has a right to appeal this decision.

STATE OF WISCONSIN DEPARTMENT OF NATURAL RESOURCES  
For the Secretary

By \_\_\_\_\_ Date \_\_\_\_\_  
Robert W. Roden, Director  
Bureau of Water Regulation & Zoning

**CORRESPONDENCE/ MEMORANDUM****STATE OF WISCONSIN**

DATE: October 10, 1986

3530-3

TO: Jim Lissack - WCD  
Douglas Morrisette - SD  
Scott Hausmann - WZ/6  
Larry Larson - WZ/6

Insertion: Chapter 120, Water  
Regulation Handbook,  
Chapter 15, FP/SL  
Guidebook

FROM: Robert W. Roden - WZ/6

SUBJECT: Projects Authorized by s. 30.202, Stats.

Several questions have arisen regarding the proper interpretation of s. 30.202, Stats. (created by Chapter 240, Laws of 1981), in regard to dredging and the disposal-of dredged material in the Mississippi, St. Croix, and Black Rivers.

1. To what geographic area does the law apply?

Section 30.202 applies to those segments of the Mississippi, Black, and St. Croix rivers where the Corps of Engineers maintains navigation channels. While coverage of the law is not limited to the navigation channel itself, it cannot be applied on the Black or St. Croix rivers upstream of the authorized navigation channels. In addition, the law only applies to disposal of dredged materials in Wisconsin waters although these materials could have been dredged from waters within the states of Iowa or Minnesota.

2. What types of actions are covered?

Dredging by the Corps does not need a state permit since it is not an activity covered by Section 404(t) of the Clean Water Act. Corps actions involved in the disposal of material dredged from the beds of these rivers (below their ordinary high-water marks) are eligible for the statutory exemptions which are listed, provided the actions are sanctioned through the "GREAT" process as outlined in the memorandum of understanding. These include actions needed for proper and environmentally sound disposal of dredged material, such as placing riprap along a dredged material island to prevent erosion.

3. Who is authorized to do work which can be exempted by the statute?

Authorized work may be done by the U.S. Army Corps of Engineers or by any agent working on behalf of the Corps of Engineers. This would mean work done on behalf of the Corps through a written agreement or under a contract. It does not include work undertaken by a third party and merely permitted or otherwise allowed by the Corps.

4. What does the statutory exemption mean?

The exemption means that these types of projects are not subject to following procedural requirements or obtaining specific permits or approvals which are listed in s. 30.202. Also, this exemption allows certain things to be done (e.g., island creation) which are not allowed under other statutes. While the Department does not need to follow the "letter" of these other laws because of the procedural exemptions, we should do our best to follow their "spirit" and to not undertake projects which would be contrary to major substantive provisions of those laws that we are being exempted from.

5. What should we do to cooperate with local zoning officials?

First, we need to be clear that s. 30.202 indeed provides a statutory exemption from local floodplain or shoreland zoning ordinances. In addition, we must recognize that other local zoning ordinances adopted under other statutory provisions (e.g., s. 59.97, Stats.) are not overridden and permits under those zoning ordinances must still be obtained. Again, we should make the maximum effort to avoid projects that would be contrary to provisions in NR 115, NR 116, NR 117, or NR 118. For projects in the hydraulic floodway of these rivers, we should perform the proper engineering analysis, advise the local unit of government of new water surface elevations, and make appropriate legal arrangements with affected property owners (you recall that we require this of the Department of Transportation).

RWR:ccb

cc: Steve Miller - WM/4  
Jim Addis - FM/4  
Terry Moe - WCD  
Claire Enerson - Dodgeville  
Michael Cain - LC/5

7313J

## CORRESPONDENCE/ MEMORANDUM

## STATE OF WISCONSIN

DATE: March 20, 1987

FILE REF: 3550 (WMC)

TO: District Directors

PMMS Response

Insertion: Chapter 120, Water Regulation Handbook

FROM: Scott Hausmann - WZ/6

Distribution: Program Staff

SUBJECT: Interpretation of 30.20(2) and NR 346.09

We have been asked the question that if the Corps of Engineers dredges and stockpiles usable sediment that is offered for sale to any interested party does the Corps or sponsoring municipality have to reimburse the state for the material sold.

The keys to this question are:

1. Does s. 30.20, Stats., apply to the project?

A threshold question is whether the project falls within the preview of s. 30.20, Stats. If the Corps of Engineers is the project sponsor and the project is exempt from our s. 30.20, Stats., requirements, then the contract fee requirements would not apply to the dredge material.

If the project is locally sponsored and s. 30.20 applies, then the issue must be reviewed further.

2. Does the contract fee requirement apply to the water body being dredged.

Section 30.20(1), Stats., provides that no person may remove material from the bed of any navigable lake or the bed of any outlying water without a contract. "Outlying waters" means Lake Superior, Lake Michigan, Green Bay, Sturgeon Bay, Sawyer's harbor and the Fox River up to DePere. The contract fee requirement only applies to removal of materials from the beds of natural lakes as defined in NR 346.03(5), Wisconsin Administrative Code. This definition includes certain "non-artificial widenings of a river channel."

For many municipal projects, the dredging may occur on river bed rather than from the bed of a natural lake. The NR 346 dredging contract fee would not apply to those dredge spoils which are not from the bed of a "natural lake."

3. Does the project meet the exemption standards under NR 346.09, WAC and s. 30.20(2)(a), Stats.?

Subsection 30.20(2)(a), Stats., provides that "Every contract . . . shall fix the compensation to be paid to the state for material so removed, except that no compensation may be paid for the material if the contract is with the municipality . . . and the material is to be used for a municipal purpose and not for resale."

This same language is contained in NR 346.09, WAC.

The statute authorizes a waiver of the contract fee only if the dual standard is met, i.e., the project is for a "municipal purpose" and the material is not offered for "resale." It is our opinion that the resale of the dredged materials removed it from the statutory exemption and requires us to impose the dredging contract fees. The fees should be determined consistent with s.NR 346.05, WAC.

Reviewed By: John Coke  
Mike Cain

RWR:JC:sm

**CORRESPONDENCE/ MEMORANDUM**

**STATE OF WISCONSIN**

DATE: March 18, 1987

FILE REF: 3500 (WMS)

TO: District Directors

PMMS Response

Insertion: Chapter 120, Water Regulation Handbook

FROM: Robert Roden - WZ/6

Distribution: Program Services

SUBJECT: Program Guidance on Farm Drainage Ditches

We have been asked to provide program guidance concerning the exclusion of farm drainage ditches from section 30.20, Wis. Stats.

In 1981 the legislature changed the status of farm drainage ditches by declaring them not navigable unless "it is shown that the ditches were navigable streams before ditching." It further defined a farm drainage ditch as "any artificial channel which drains water from lands which are used for agricultural purposes." This program guidance is intended to further clarify the statutory definition by defining what is meant by: stream, artificial channel, agricultural purposes, prior stream history and draining lands.

"Streams" are defined in the handbook definition section (see page 7). This definition states that a "stream means a watercourse..." Watercourse is also defined in the handbook:

"A running stream of water; a natural stream fed from permanent or natural sources, including rivers, creeks, runs, and rivulets. There must be a stream, usually flowing in a particular direction, though it need not flow continuously. It may sometimes be dry. It must flow in a definite channel, having a bed or banks, and usually discharges itself into some other stream or body of water. It must be something more than a mere surface drainage over the entire face of the tract of land, occasioned by unusually freshets or other extraordinary causes. (Hoyt v. City of Hudson)"

An "artificial channel" means that the channel exists as a result of human excavation and has lost its natural stream definition. An altered stream section does not necessarily result in a stream becoming converted to an artificial channel. For example, a riprap project may significantly alter the bank and portions of the stream bed without causing the stream to lose its definition, i.e., it still looks like a stream. The call between artificial channel and stream should be based upon the predominate characteristics of the water body involved. Artificial channels should be relatively uniform in stream slope, uniform in cross section and relatively void of meander patterns. Artificial channels do not include natural water courses either upstream or downstream of the altered section. It is possible that an artificial channel may have been created from a drainage feature that has had a previous stream history. Previous stream history may be established from traditional methods; e.g., original government surveys, aerial photography, plat maps, etc. After stream history has been established, it is necessary to establish a history of navigation. History

of navigation can be established by newspaper articles, interviews, photography or personal accounts. If it is not possible to establish a record on what appears to be obviously navigable watercourses, we should attempt to establish navigability by geometry of the area. To be considered navigable, we should be prepared to show that the previous stream was at least 4 feet wide and carried at least 6 inches of water on an annually recurring basis. It is possible to determine the likelihood of navigation by estimating the annually reoccurring flood and comparing to water depth. For example, in order to attain 6" depth of stream on a 4 foot wide stream with slope of .01, .001 and .0001 ft/ft, it would be necessary to have flood flows of 0.6, 1.5 and 6.5 cfs, respectively. The meandering of the channel must also be considered. Considering the meander pattern as a standard sinusoidal wave, the ratio of amplitude to the length should not exceed 8 if the stream is to be navigated with a 10-foot skiff or canoe.

"Draining of lands used for agricultural purposes" means an improvement or expansion of the existing drainage systems of waterways, watercourses and rivers in order to more efficiently drain surface waters and/or to lower the existing water table on existing agricultural lands. The act of draining, as referenced in this statute, should be construed to mean new ditching and not the deepening or widening of downstream control sections. The lands drained should be immediately adjacent to the project. The channel or channels upstream or downstream from the project, although part of the drainage system, do not serve as agricultural drains. This activity must be associated with an existing agricultural need to crop the land.

RR:KJ:dlm

Reviewed by: Scott Hausmann  
Mike Cain  
Ken Johnson

**CORRESPONDENCE/ MEMORANDUM****STATE OF WISCONSIN**

DATE: January 8, 1988      FILE REF: 3550 (WMC)

TO: District Directors

PMMS Response

Insertion: Chapter 120, Water Regulation Handbook

FROM: Scott Hausmann - WZ/6

Distribution: Program Staff Bureau of Legal Services

SUBJECT: Underwater Search &amp; Discovery Procedures (Treasure Hunting)

We have been asked several questions regarding the practice of "Treasure-Hunting" operations in navigable waterways. Treasure hunting operations are distinguished from typical dredging operations requiring permits under s. 30.20, Stats., by the characteristics of: Bed material is being sifted and redeposited in or very close to its original location, removal is limited to "foreign" matter, material is handled by hand or equipment that is manually portable, volume of material disturbed is minimal and no significant recontouring of bed is involved. The questions asked and their answers are as follows:

1. Question: What permit or approvals will be required?

Answer: Past Department practice has been to not require formal permits for this activity. This past practice was premised on the impacts of such a limited activity would be minimal, if any. To date it is not apparent that this activity is widely practiced or that the impacts are significant enough to warrant a change in the way we handle this activity. No formal approval or permit will be required for this activity unless a substantive complaint is received or the activity does not meet the criteria identified below.

2. Question: Can this activity be done on some waterways and not others?

Answer: Yes. Such a determination should be made on a case-by-case basis considering such factors as potential impacts to spawning areas, destruction of vegetation, changes in bottom contours, increased turbidity, disturbance of hazardous or toxic materials, conflicts with other users of the waterbody, etc.

3. Question: What types of notification or limitations would be required?

Answer: Prior notification to the Department will not be required for this activity. Limitations may be placed on this activity, if warranted, to resolve a substantive complaint and may consist of items such as, but not limited to, the following:

- a. Removal of undesirable materials such as broken glass, cans, etc.
- b. No substantial recontouring of the lake or stream bed, any holes created should be refilled at days end.



- c. Need for turbidity curtains.
- d. Need for restricting operation to certain times of the day, week or year.
- e. Limit equipment size to that which is manually portable.

4. Question: Does the size of the area make a difference in our determination:

Answer: Yes, in order for the potential impacts of this activity to be considered minimal and therefore not requiring a permit the project size should not exceed 100 square feet or area or 4 cubic yards of volume of material disturbed per day per project site. Projects in excess of these size limits or that involve complaints or significant impacts that cannot be resolved by incorporation of the limitations identified above should be required to obtain a s. 30.20 permit.

In addition, anyone inquiring about the practice of "treasure hunting" should be informed that objects lost or resting on the bottom of the waters of the state are presumed to be owned by the original owner, unless there has been a transfer arising out of insurance considerations or other legal procedures.

Section 170.07 to 170.11, Stats., give the proper procedure to follow where any person finds goods of another person of the value of \$3.00 or more and the owner is unknown. It is possible that such procedures might be applicable to any property found on the bed of any waters of the State. If the owner of the property found is known, it is assumed that he is entitled to it.

Under certain circumstances, if property is found placed or imbedded in navigable waters, it is possible that the owner of the land forming the bed of the water where the article is found may claim to be the owner, assuming that he is different from the original owner of the article. This would be applicable where the navigable water in question is a reservoir or a stream. The State of Wisconsin is considered to be the owner of the bed of any natural lake.

In cases where the objects to be salvaged have a historical or archaeological interest, a permit must be obtained from the Director of the State Historical Society. The conditions under which such permits can be granted are given in section 27.012, Statutes.

Reviewed By:  
John Coke  
Michael Cain

JC:hf

**CORRESPONDENCE/ MEMORANDUM****STATE OF WISCONSIN**

DATE: October 10, 1988

TO: District Directors

Insertion: (WMS)  
PMMS Response  
Chapters 100, 110, 120 Water Regulation Handbook

FROM: Scott Hausmann

SUBJECT: Section 30.19(lm)(e) exemption from permit requirements for authorized enlargements

1987 Wisconsin Act 374, the new Chapter 30, changed section 30.19 to allow for maintenance dredging of existing authorized enlargements. Now that we've had a little experience with this section several questions have come up which I'll address in this memo.

1. NR 340 regulates non metallic mining and specifies the requirements for review and permitting. How does this administrative code relate to the exemption for work required to maintain authorized enlargements found within section 30.19?

All existing permits authorized under the old section 30.19 and NR 340 remain unaffected. The status of mining activities issued since adoption of the Act 374 will depend on how the permit was drafted. If the permit cited only section 30.19, the exemption found within section 30.19 is applicable and we could not require a permit for work required to maintain the original dimensions without revoking the original authority. You should note that section 30.07 allows for the revocation of Chapter 30 permits "for good cause".

When appropriate, future permits for non metallic mining should include specific conclusions of law specifying that the department has regulatory authority under sections 30.19, 30.195 and 30.20. Additionally, these permits should specifically state within the order section that additional permits are necessary for maintenance dredging of unconnected enlargements.

2. Section 30.07 restricts the length of permits to 3 years with the possibility for a 2 year extension. Section 30.20(2) allows the department to issue contracts and permits for up to 10 years. Since the two statutes conflict, the more specific language in s. 30.20 Stats., governs for dredging permits. How will this affect permits issued under NR 340?

Permits issued prior to the enactment of Wis. Act 374 are unaffected. Permits issued after the enactment are subject to these time frames and must be repermited upon their expiration. If a permit contains a s. 30.20, Stats., permit or contract, we can use the longer time frames outlined in that statute.

3. Some harbors are or have been authorized by use of section 30.19. Can the Department retain authority over dredging operations?

The exemption language within section 30.19 does exclude us from requiring a future permit but we should be able to draft permits to allow our continuing review. For example, a 30.19 permit could be

conditioned with a requirement to notify the department of any future dredging and allow for a 30 day review period. I suggest that you use such a provision cautiously and coordinate with the bureau.

4. Some 30.19 permits issued before the enactment of Wisconsin Act 374 specified a sunset date within the permit. How are these permits affected by the exemption from permit for maintenance dredging found within s. 30.19 Wis. Stats.?

We construe any permit limitations issued before the enactment of Act 374 as being valid and unaffected by the exemption specified in section 30.19(lm)(e). It would be unreasonable to assume that specific permit conditions, necessary to protect the water body involved, would be overruled by future statutes. A contrary assumption would force us to anticipate future legislation within the permit process. Therefore, an authorized enlargement with an expired permit date will be considered completed and will require new authorization before maintenance dredging can occur. If no expiration date was specified within the original 30.19 permit conditions, authorization for the enlargement must be considered "active" and the exemption found within s. 30.19(lm)(e) valid.

Reviewed by: Ken Johnson  
Robert Sonntag  
Mike Cain



## CORRESPONDENCE/ MEMORANDUM

## STATE OF WISCONSIN

DATE: June 29, 1989  
TO: District Directors

IN REPLY REFER TO: 3550  
(WMC)

PMMS Response

Insertion: Chapter 120 of the Water Regulation Handbook and Chapter 4 of the Floodplain Shoreland Management Guidebook

FROM: Scott Hausmann - WZ/6

Distribution: WRZ Program Staff Bureau of Legal Services

SUBJECT: DNR Authority to Regulate Mossing and Peat Mining

In this regulatory context we will define mossing as the removal of actively growing sphagnum moss where underlying materials are left intact and capable of supporting sphagnum regrowth. Such activity does not include excavation of soils on uplands or bed materials below the ordinary high water mark of waterways. Peat mining is defined as the excavation of sphagnum and related underlying organic matter which is at least partially decomposed (peat) and comprises either part of the soil on uplands or bed materials in waterways.

### CHAPTER 30 JURISDICTION

Where sphagnum moss is attached to the bed of a waterway it may be harvested by the riparian who holds title to the bed at the location of the harvest. This policy is consistent with case law that generally holds that products of the bed of a waterway belong to whoever holds title to the bed. Moss from free floating bog mats may be harvested by either riparians or nonriparians. The Department must apply endangered species laws before allowing harvest to proceed (s. 29.415, Stats. and NR 27, Wis. Adm. Code).

### SHORELAND AND WETLAND ZONING PROVISIONS

Mossing is a permitted use, i.e. harvesting of a renewable wild crop, under NR 115.05(2)(c)2. and NR 117.05(2)(b). By the rules this activity is subject to performance standards, i.e. the removal may not be injurious to the natural reproduction of the crop and may not involve filling, flooding, draining, ditching, excavating and so on.

Peat mining is not a permitted use of shoreland wetlands. It is an activity that is inherently different than moss harvest. It involves excavation of a nonrenewable resource and may alter the basic hydrology, species composition and function of wetlands. Peat mining in shoreland wetlands requires site specific application of appropriate wetland rezoning criteria and amendment procedures outlined in administrative rule and local ordinance. Some fish and wildlife habitat improvement projects which are a permitted use of shoreland wetlands may involve incidental removal of peat.

### SECTION 404 OF THE CLEAN WATER ACT

Generally, mossing and peat mining will not require Section 404 permits or Section 401 water quality certification since both activities involve the removal of materials and not a discharge of pollutants to waters of the U.S. However, related activities which involve discharges to wetlands or waterways (such as road construction or ditching and side casting spoils to dewater an area) may require general or individual Section 404 permits and Section 401 water quality certification.

Related Guidance: Chapter 190 Water Regulation Handbook-Floating Bogs Program Guidance dated 11/04/85 - Municipal Nonmetallic Mine Reclamation Ordinances (s. 66.038, Stats.).

Requested by: Vic Pappas

Drafted by: Mike Dresen

Reviewed By: Dale Simon - WZ/6  
Mike Cain - LC/5  
Linda Wymore - LC/5

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DATE: August 8, 1989      FILE REF: 3550 (WMC)

TO: District Directors

PMMS Response

Insertion: Chapter 120 of the Water Regulation Handbook and Chapter 4 of the Floodplain Shoreland Management Guidebook

FROM: Scott Hausmann - WZ/6

Distribution: WZ Program Staff Bureau of Legal Services

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Requested by: Vic Pappas

Drafted by: Mike Dresen

Reviewed By: Dale Simon - WZ/6  
Mike Cain - LC/5  
Linda Wymore - LC/5

MD:EB:lk



**CORRESPONDENCE/ MEMORANDUM**

**STATE OF WISCONSIN**

DATE: August 8, 1989  
TO: Scott Hausmann  
FROM: Bob Roden  
SUBJECT: Appeal Rights for Actions With No Notice

Mike Cain has just informed me that Bob Selk (Dept. of Justice) advised that there are two options he sees as being legally valid for s. 30.20 contract decisions in view of the R. W. Docks Court of Appeals decision. These choices are:

1. Only offer the contested case hearing option for appeal of the decision.
2. Issue a "preliminary decision" and offer to negotiate with the applicant if there is a dispute over the decision (this is apparently a procedure used in the Solid Waste program)

Given the workload implications of the second option, the first one appears to be the way to go. The problem is that this approach should be used for all decisions where there is no public notice, not just for decisions under s. 30.20.

I have advised Duane Lahti, who has 3 pending s. 30.20 contract decisions, to only offer the contested case hearing appeal option in these decisions. Can you have staff prepare more detailed guidance [listing the ch. 30 and 31 plus shoreland zoning decisions where there is no public notice (this might also apply to a number of 401a decisions) and including the correct language] and also take steps to change the permit format where it is necessary? I think we can continue to use existing forms until they are exhausted; the chances of someone appealing an unnoticed grant seems pretty small.

Any questions, let me know. Thanks.

cc: Mike Cain - LC/5  
Water Management Supervisors

**CORRESPONDENCE/ MEMORANDUM**

**STATE OF WISCONSIN**

DATE: May 9, 1990 FILE REF:

TO: District Directors

PMMS Response

Insertion: Chapter 120 of the Water Regulation Handbook

FROM: Scott Hausmann - WZ/6

Distribution: WRZ Program Staff

SUBJECT: Time Limits for Permits and Contracts Issued Under s. 30.20, Stats.

Recently we have been asked to clarify the time limits for permits and contracts approved under s. 30.20, Stats. In order to gain a clear understanding of the applicability of law we must first understand the meaning of a few terms within each subsection of the law.

Under section 30.20(1)(a)

Navigable lake should be construed as any "natural navigable lake."

Outlying waters means Lake Superior, Lake Michigan, Green Bay, Sturgeon Bay, Sawyer's Harbor and the Fox River from its mouth up to the dam at DePere as defined in s. 29.01(11), Stats.

Under section 30.20(1)(b)

"Any lake not mentioned under par. (a)" includes all other navigable lakes subject to the jurisdiction of the department under chapter 30, Stats. This would include that portion of additional lake bed created by the raising or enlarging of a natural lake (dam on outlet) or any artificially constructed lake authorized under chapters 30 or 31 or an artificial lake that has accrued because status through time, used or as determined by the courts.

Any stream means all streams in the state and any farm drainage ditch that was not a navigable stream before ditching if the dredging may have a long-term adverse affect on cold-water fishery resources or may destroy fish spawning beds or nursery areas.

Under section 30.20(2)

Contract means a legally binding agreement between the state and any person to remove material from the bed of any natural (emphasis added) navigable lake or any outlying water as required under s. 30.20(1)(a), Stats.

Permit means a document of permission that may be issued by the state only upon a finding that the issuance of a permit will be consistent with the public interest in any stream or lake as defined under s. 30.20 (1)(b), Stats., above.

Under section 30.20(2)(a)

Contracts are authorized under this paragraph for natural navigable lakes and outlying waters when the purpose is for the lease or sale of the bed material. Contracts under this section must be consistent with public rights and the contract includes conditions as may be necessary for the protection of the public interest and the interests of the state. Under this section, contracts are limited to a maximum of 5 years.

Under section 30.20(2)(c)

Contracts are authorized under this paragraph for natural lakes and outlying waters when the purpose is not for the lease or sale of bed material and only upon a finding that a contract approved under this paragraph will be consistent with the public interest. In this case contracts are limited to a 10 year period provided the recipient of the contract notifies the department at least 30 days before removing any material. Because contracts issued under this paragraph can be for a period of up to 10 years and considering dredging is seasonal activity, the 30 day notification provision is required for each dredging season.

Permits may be issued under this paragraph for the removal of material from the bed of any stream or artificial lake, not included in s. 30.20(1)(a), Stats., provided the issuance of a permit is consistent with the public interest. These permits may be issued up to ten years provided the applicant notifies the department at least 30 days before removing any material.

In summary, dredging contracts subject to the 5 year limitation under s. 30.20(2)(a) are for dredging projects in which the bed material is for lease or sale. All other dredging contracts and permits are subject to the 10 year limitation.

Requested by: Dale Lang NCD

Drafted by: Dale Simon WZ

Reviewed by: Ken Johnson WZ  
Michael Cain LC

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**CORRESPONDENCE/ MEMORANDUM**

**STATE OF WISCONSIN**

DATE: June 1, 1993

FILE REF: Dredging

PLACEMENT: Ch. 120, WZ Guidebook

DISTRIBUTION: WZ Program Staff

TO: John Gozdziński - NWD/Spooner

FROM: Scott Hausmann - WZ/6

SUBJECT: Disposal of Uncontaminated Great Lakes Dredged Material

Recently you requested written clarification of Department policy and practice on in-water disposal of uncontaminated dredged material from the Great Lakes.

Until the early 1970s, the Corps under legal principal of federal supremacy routinely disposed of dredged material in the open waters of the Great Lakes. This was done over the protests and contrary to most of the Great Lakes States laws on dredging. In 1972, the Clean Water Act was passed (and subsequently modified) and sections 401 and 404T required the Corps to comply with state water quality laws and to apply for state permits. Because state law does not provide for in-water disposal of dredged material, the Corps has been prevented from disposing of dredged material in the lakes since 1972.

The basis of state policy and practice is s. 30.12 and s. 30.20, Wis. Stats. The dredging law, s. 30.20, allows the removal of materials from the bed of navigable waters by permit or contract. Case law has emphasized that the dredged material must be physically removed from the waterway and disposed of according to applicable laws. Section 30.12 regulates the placing of fills and structures and only allows "structures" to be placed in navigable waters by permit. Numerous court cases have clarified that structures must have "shape, form and utility" and that dumping, pumping or placing dredged or other unconfined, unconsolidated materials is not a structure.

Thus, the combination of ss. 30.20 and 30.12 generally prohibit the placement or deposit of dredged material into navigable waters, unless the dredged material is contained within or used as part of some type of containing structure. Our policy and practice simply repeats the legal requirement-no unconfined in-water disposal of dredged or fill material.

However, exceptions to this general policy and practice do exist, the most notable being the placement of dredged material behind approved bulkhead lines and the special legislative authority for disposal of Corps generated dredged material on the Mississippi River. (This legislation was the result of the 10 year long Great River Environmental Action Team (GREAT) study and Environmental Impact Statement.)

The specific policy and practice on the many options for the disposal of uncontaminated dredged materials are:

**Permanent Upland Disposal Site** - Landspreading, filling an abandoned gravel pit or creating a diked disposal area, are examples of permanent upland disposal. This option requires a solid waste license or waiver under ch. NR 500 to 522, Wis. Adm. Code. Upland disposal sites may require a pollutant discharge permit under ch. NR 200 if the site has a discharge to a waterway or to the groundwater.

**Transfer/Reuse Site** - A permanent site for the storage of reusable materials requires a solid waste license (or waiver of license). The site could be located on the bed of a waterway but a containment structure authorized by structure permit (s. 30.12, Stats.) would be required.

**Shore Protection** - Using dredged material in riprap or other shore protection project's does not require a permit if the dredged material is placed above the ordinary high-water mark (OHWM), or behind an approved bulkhead line. Restoration may be possible without permits or other state authority if the purpose of the filling is to reclaim suddenly lost shoreland. In this case filling must be done within one year after the damaging erosion events.

**Fill Behind Bulkhead Lines** - Dredged material may be used as fill behind an approved bulkhead line. A pollutant discharge permit or solid waste license may be required. Only a municipality may establish a bulkhead line, with department approval. To be approved the bulkhead line must be in the public interest and must conform as closely as possible to the existing shore.

**Submerged Lands Leases** - A bulkhead line may extend farther from shore if it is combined with a submerged lands lease from the Commissioners of Public Lands pursuant to s. 24.39(4), Stats. A lease must be combined with a bulkhead line in order for fill or structures to be placed in the leased area without separate permits. The lease/bulkhead line approach may be used to authorize navigation improvements, harbor facilities, or recreational facilities "related-to navigation for public use". Only the riparian owner may obtain such a lease (for recreational facilities, only municipalities that are riparian owners are eligible), although the statute does provide for sub-leasing. The Department must make findings that proposed physical changes in the leased area are consistent with the public interest and that excessive destruction of wildlife habitat will not result [see s. 30.11(5), Stats.].

**Marsh Restoration/Creation** - Instead of creating dry land, fill may be used to create or restore wetland conditions provided they would serve a public recreational purpose, including the provision of wildlife habitat. Marsh creation might be possible by combining a submerged lands lease and a bulkhead line or to replace shoreline material which has eroded in the past year. A marsh barrier project has been approved on the west shore of Green Bay using a submerged lands lease/bulkhead line.

**Filling Underwater Mining Sites** - Filling an underwater mining site is generally prohibited. It would require direct legislative authorization. The major concern is movement of the material from the site to areas where it might affect fish and wildlife habitat and water quality and navigation.

**Littoral Drift Continuation** - Breakwaters and similar structures interrupt the natural along shore transport of sediment by currents (littoral drift) causing sediments to accumulate updrift and increasing downdrift erosion. If the dredged materials are clean and of the appropriate grain size, depositing them downdrift from the artificial barrier would preserve an important natural process and certain updrift configurations might prevent entrapment of sediment. Littoral drift continuation might be possible by combining a submerged lands lease and a bulkhead line, provided the beach is open to the public. This authorization approach was used for the beach nourishment and littoral drift research projects on Wisconsin Point and Kewaunee Beach.

Legislative proposals in 1985, 1986 and 1987 to allow by permit littoral drift continuation and beach nourishment were not passed.

**Beach Nourishment** - Clean dredged materials can be used to nourish an existing beach as a shore protection method. This use requires no permit if the dredged material is placed above the ordinary high-water mark or behind an approved bulkhead line. Beach nourishment below the ordinary high-water

mark has been authorized in the past by combining a submerged lands lease and a bulkhead line, provided the beach is open to the public. Beach nourishment is commonly used to offset damage caused by storms or by coastal structures that interfere with littoral drift. A pollutant discharge permit may be required and standards in ch. NR 347 dealing with particle size must be met.

**Island Creation** - Fill may be used to create an island if the material is contained within a barrier structure. A structure permit or a submerged land lease and bulkhead line would be required to pursue this option. Islands without a confining structure have been created on the Mississippi using the special authority given to the Corps of Engineers following the GREAT study.

**Lakebed Grant** - A lakebed grant is the transfer of the title of submerged lands from the state to a municipality by the state legislature. On Lake Michigan, laws governing the establishment of bulkhead lines and laws requiring--permits for placement of structures or deposits in navigable waters and for dredging are not applicable in lakebed grant areas (see s. 30.05, Stats.). However, other state laws (e.g. chs. 144 and 147) still apply in these areas. On Lake Superior, exemptions from permit requirements must be contained--in the legislation authorizing a specific lakebed grant. Lakebed grants allow municipalities to fill the designated area for certain specified public trust purposes. (Note: Corps permits are required for any filling under Section 10 of the Rivers and Harbors Act and Sections 404 of the CWA. A Section 401 water quality certification would also be required).

Other options for the disposal of uncontaminated dredged materials that have been permitted in the past include:

1. Surface application on agricultural land as a soil conditioner
2. Capping for landfill
3. Highway ice control
4. In the construction of other projects such as marinas, harbor facilities, bridges, causeways, parks, roads, sewage treatment facilities, etc.

Additionally, I do not know of any current legislative proposals to allow unrestricted in-water disposal in the Great Lakes of Wisconsin, nor do I have any knowledge that the policy and practices of the regulating agencies in Minnesota are significantly different than those of the Department except that Minnesota does not have a general statutory prohibition on filling in navigable waters. If you have any additional questions please contact me.

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cc: Ted Smith - NWD/Spooner  
Robert W. Roden

## CORRESPONDENCE/ MEMORANDUM

## STATE OF WISCONSIN

DATE: June 18, 1997

TO: Water Management Specialists

FROM: Mary Ellen Vollbrecht - FH/4

FILE REF: HANDBOOK CH.120

SUBJECT: **Major Pipeline Construction Projects - Department Staff Roles and Process**

Recently we have received permit applications for a major pipeline project that traverses the state. We are also aware of other major pipeline proposals and railroad spur expansions that are in the early stage of planning. These activities often involve multiple wetland and waterway crossings that require extensive staff time to review and review. The following process is intended to help make these work efforts as efficient as possible.

Initial contact is often made by the applicant with central office staff looking for a specific department contact. Because the wetland/water regulatory programs are highly decentralized and require a multidisciplinary review including compliance with WEPA, the applicants are instructed to set up a preconsultation process with the appropriate WMS prior to submitting an application. Frequently, the preconsultation process results in the avoidance and minimization of adverse impacts and special permit conditions are worked out between the applicant and the department.

The primary disciplines associated with these projects are the water management specialists - Fishery Management and Habitat Protection (FH) and environmental analysis personnel - Integrated Science Services (SS). Secondary support is provided wildlife managers, fishery managers, water quality biologists, foresters and law enforcement.

To facilitate the permitting process for both the applicant and department staff the following guiding principles should be followed.

### Staff Roles

1. The wetland and water regulatory decisions applicable to this type of activity are the responsibility of the water management specialist (WMS) and similarly assigned staff.
2. Central office SS staff are responsible for coordinating the review and development of the EIR with SS field staff. Once completed and approved, SS central office staff are responsible for notifying the WMS concerning compliance with WEPA.
3. The WMS is responsible for coordinating the review and comments of department staff and developing permit/water quality certification conditions in consultation with other staff.

### Permit Application Process

4. The WMS should be advising the applicant that a \$100 permit fee will be required for each waterway and wetland crossing where the department has to make a permit decision or water quality certification determination. This change in previous guidance to both the applicant and staff recognizes the substantial review and coordination time needed for these projects. The applicant is aware of the change in fee structure. There will be

some instances where both chapter 30 and NR 299 (s. 401, CWA certification) will be applicable to the same crossing. In that situation a \$100 fee will cover both.

5. Applications for a permit and/or water quality certification should include the minimum information required under our standard water regulation permit and water quality certification processes. Design and plan information will vary depending on the sensitivity and uniqueness of the area being traversed. Generic plan drawings with specific dimensions applied to the plans are common to the regulatory process. Many crossings will likely fall under this category. Conversely, there will be crossings involving unique resources or physical settings where more detailed plan information is appropriate and should be required of the applicant.

6. Regions are encouraged to assign each crossing a separate docket number to reflect alteration to a particular waterway but combine the permit decisions in one document on a county by county basis. The same recommendation holds true for decisions under NR 299. This will help reduce paper work and facilitate the authorization of those activities not requiring special conditions as well as those that do. 1

7. The Corps is presently processing the Lakehead Pipeline project as one individual permit. As a result our permits and water quality certification determinations will be provided to the COE on a county wide basis, individual permit or individual water quality certification basis or any combination thereof. To promote consistency we encourage you to develop combined approvals on a county wide basis. Therefore each approval issued by the WMS will become a condition of the COE individual permit. Copies of your decisions should be sent to your COE and local zoning counterparts.

8. Previously, the Bureau agreed to issue the permits and water quality certification documents from the central office at the discretion of the WMS. In retrospect, this approach may only appear as saving field staff time, when in reality it would have only increased the time required for the regulatory process, increased communication problems, understated the actual workload associated with projects of this magnitude, and complicate the data entries of our permit tracking system. Therefore all permits and water quality certification decisions will be the responsibility of the assigned WMS. As a first step, field staff may want to determine where the standard permit conditions developed by the bureau can be applied and where specialized review and conditions are needed.

I hope this guidance clarifies the roles and process. If you have any other questions please contact Dale Simon, Steve Ugoretz or me.

cc: Regional Directors  
Regional Water Leaders  
Regional Land Leaders  
Basin Team Leaders  
Susan Sylvester - AD/5  
Dave Meier - AD/5 S  
teve Miller - AD/5  
Mike Staggs - FH/4  
Dale Simon - FH/6  
Steve Ugoretz - SS/6



## CORRESPONDENCE/ MEMORANDUM

## STATE OF WISCONSIN

DATE: April 13, 1998

FILE REF: Dredging

PLACEMENT: Handbook Ch. 120

TO: All Water Reg. Guidebook Holders

FROM: Mary Ellen Vollbrecht - FH/6

SUBJECT: Guidance for Utility Crossing Projects

There are basically five different scenarios with which we review utility projects crossing public waters and wetlands. They receive different levels of review based on installation methods and natural resources involved. Fees vary accordingly. Those are:

### 1. One Time Waterway/Routine Methods.

Utilities that have been granted a one time permit for routine electric utility waterway crossings that include overhead, bored or plowed utility line crossings. **Please note these permits do NOT authorize wetland crossings that are not located below the OHWM of a public waterbody.** These permits require an annual notification to the department and include information such as location map of activities, construction method, project schedule and project corridor description. These projects are then reviewed by department staff for compliance with the conditions of the permit and are presumed to be approved unless we notify the utility. These projects are linear in nature and may involve crossings throughout the state. In order to comply with the new fee schedule these permits are considered to be a consolidated utility crossing permit and will be subject to an annual fee of \$500.00.

### 2. Occasional Waterway/Routine Methods.

Utilities that have not been granted the one time permit as described but use the same construction techniques i.e. plowed waterway crossings and provide the same information, should be granted a single permit on a GMU/County basis. Each of these permits shall be considered a consolidated utility crossing permit and will be subject to a fee of \$500.00. These projects will require more coordination and time as opposed to those permits that have been approved under 1. above. We would encourage you to work with these applicants in developing the one time permit but would still require the fee on an annual basis.

### 3. Waterway/Trenching Methods.

Utilities or pipeline projects using trenching methods for waterway crossings shall be evaluated on a crossing by crossing basis and require a \$300.00 fee for each crossing. These projects will require a permit application and appropriate information for each crossing. However, approvals should be consolidated on a GMU/County basis to minimize paper work.

### 4. Wetland/Routine methods.

Routine utility wetland crossings that include overhead, bored or plowed utility line crossings and provide the information described in 1. above, should be granted water quality certification on a GMU/County basis and are considered a consolidated utility crossing and require a \$500.00 fee. We would encourage you to work with these utilities to develop a long term water quality certification that could be automatically renewed on an annual basis but would still require the fee.

#### 5. Wetland/Trenching Methods.

Utilities or pipeline projects using trenching methods for wetland crossings shall be evaluated on a crossing by crossing basis and require a \$300.00 fee for each crossing. These projects will require a permit application and appropriate information for each crossing. However, water quality certification approvals should be consolidated on a GMU/County basis to minimize paper work.

If you have any questions please contact either Dale Simon (608)267-9868 or myself (608)264-8554.

CC: Susan Sylvester - AD/5  
Michael Staggs - FH/4  
Michael Cain - LS/5  
Dale Simon - FH/6  
Region Aquatic Habitat Experts  
Water Basin Supervisors

## CORRESPONDENCE/ MEMORANDUM

## STATE OF WISCONSIN

DATE: November 12, 1998

FILE REF: Water Reg. Guide Book

Insert - Chapter 120

TO: Water Regulation Guidebook Holders

FROM: Mary Ellen Vollbrecht - FH/6

SUBJECT: Fees for Utility Water and Wetland Crossings

Please use the following criteria when determining fees for Utility crossing projects.

*Waterway and wetland utility crossings that are installed with a vibratory plow will be charged a \$50 fee for each crossing. These projects may be authorized under NR 299 for COE regulated projects or department regulated projects under s. 30.20 Stats.*

Presently our water quality certification conditions for NWP 12 allow us three basic options. Those are:

- 1) Projects located in calcareous fens, state scientific and natural areas, trout streams including wetlands within 1000 feet, trout lakes and wetlands within 1000 feet and state or federal wild and scenic rivers including wetlands within 1000 feet require individual state water quality certification or denial.
- 2) Projects located in primary environmental corridors may require individual water quality certification, confirmation of compliance with our conditions, denial or approval by default if we do not respond within 30 days from receipt of a complete application.
- 3) Projects not identified under 1 or 2 above may require individual water quality certification, confirmation of compliance with our conditions, denial or approval by default if we do not respond within 10 days from receipt of a complete application.

Plowed utility projects subject to s. 30.20, Stats., are presently processed under a simplified permit review process. We will be developing a new form similar to that used for riprap, fords, etc. which will replace the 182.017 Stats., form. In the meantime, use the existing form.

*Consolidated utility waterway crossing projects that are installed with a vibratory plow will be charged a \$500 permit fee and are valid for one year. Consolidated utility wetland crossing projects that are installed with a vibratory plow will be charged a \$500 water quality certification fee and are valid for one year. These annual permits must be submitted to the department between January 1 and January 30 of each calendar year. Supplemental projects not identified in the annual permit will require a \$50 fee for each additional plowed crossing.*

*All other utility crossings installed by open trench excavation in a wetland or waterway require a \$300 fee for each crossing. These projects may be authorized under NR 299 for COE regulated projects similar to the procedures described under 1 above or Department regulated projects under s. 30.20 Stats., using our conventional permit process. Projects authorized under s. 30.20, Stats., automatically serve as our water quality certification determination for Corps regulated projects.*

This document is intended solely as guidance and does not contain any mandatory requirements except where requirements found in statute or administrative rule are referenced. This guidance does not establish or affect legal rights or obligations and is not finally determinative of any of the issues addressed. This guidance does not create any rights enforceable by any party in litigation with the State of Wisconsin or the Department of Natural Resources. Any regulatory decisions made by the Department of Natural Resources in any matter addressed by this guidance will be made by applying the governing statutes and administrative rules to the relevant facts.

**CORRESPONDENCE/ MEMORANDUM**

**STATE OF WISCONSIN**

DATE: August 25, 1999

FILE REF: 8300

TO: Mary Ellen Vollbrecht-FH/3  
Dale Simon-FH/3

FROM: Michael Cain-LS/5.

SUBJECT: Decision in State v. Dwyer Relative to Dredging Projects on Lands Owned by Another Pursuant to Section 88.90, Stats.

Attached is a copy of the Court of Appeals decision in State v. Dwyer, 91 Wis 2d 440(Ct. App. 1979). This 1979 decision deals with a dredging project that was undertaken by a private individual across DNR lands under s. 88.90, Stats. Based on some recent questions from staff, it was suggested we distribute this to all field staff.

Section 88.90, Stats., allows a person to enter onto the lands of another to dredge "whenever a natural watercourse becomes obstructed through natural causes" if a persons lands are "damaged by the effect which the obstruction has upon the flow of the water...".

The Court of Appeals decision, which was published and has statewide precedential value, outlines a number of important points:

- Dwyer argued that 30.20 didn't apply since he was proceeding under s. 88.90. The Court held that he must also obtain a permit under s. 30.20, stating, "Section 88.90 recognizes the right of a private landowner to protect his property from damage, yet sec. 30.20 recognizes this may not be done at the expense of the public interest in the waters involved."

- Dwyer argued that 30.20 only applies to navigable streams. The Court of Appeals reaffirmed that it applies to both navigable and non-navigable streams.

Attachment

**OFFICIAL WISCONSIN REPORTS. [AUG. 6]**

State v. Dwyer, 91 Wis. 2d 440.

STATE, Plaintiff-Respondent, v. DWYER,  
Defendant-Appellant.  
Court of Appeals

*No. 78-807. Argued June 22, 1979@Decided August 6, 1979.*  
(Also reported in 283 N.W.2d 448.)

1. Waters §19\*-removal of obstruction--construction of statute. Where statute provided that "No person shall remove any material from the bed of any lake or stream not mentioned in one paragraph without first obtaining a permit . . ." and other paragraph referred only to navigable lakes and outlying waters, provision covered nonnavigable lakes and navigable and nonnavigable streams by plain language interpretation, thus it was not necessary to first determine navigability in order to establish that permit requirement applied Stats §30.20 (1) (b)).
2. Statutes §155\*--construction-chapter title.  
Since titles to chapters in statutes may be used to help resolve existing doubt about statute's meaning and may not be used to create doubt, where clear language of statute required permit for dredging nonnavigable streams, there was no need to consider meaning of titles which included only navigable waters.
3. Waters §24\*-removal of obstruction-statutory right-permit.  
Statute providing that owner or occupant of lands damaged by natural obstructions in waterway on land of another may rremove obstruction without being charged with trespass did not supersede or waive statute requiring party to first obtain permit from Department of Natural Resources before removing such obstructions, since such statutes protect both interests of individual landowner and public (Stats §§30.20(1)(b), 88.90(3)).
4. Waters §24\*-removal of obstruction-permit-injunction propriety.  
Since statute requires owner or occupant of lands damaged by natural obstructions in waterway to obtain permit before removing such obstructions from waterway on another's land, where defendant did not obtain permit before conducting dredging operations on state lands, defendant was properly enjoined from further dredging, even though obstruction in waterway on state land caused defendant's farmland to be too wet to permit operation of farm equipment.

**\*See Callaghan's Wisconsin Digest, same topic and section number.**

APPEAL from an order of the circuit court for Sheboygan county: DANIEL P. ANDERSON, Judge. Affirmed.

For the appellant, there was a brief and oral argument by *Steven O'Meara, O'Meara & Eckert of West Bend*.

For the respondent, there was a brief by *Bronson C. La Follette*, attorney general and *Kirbie Knutson*, assistant attorney general, with oral argument by *Kirbie Knutson*.

Before Voss, P.J., Brown, J., and Bode, J.

BODE, J. This case is before the court to review an order dated November 3, 1978 permanently enjoining the defendant, Francis Dwyer, from conducting or contracting for dredging operations on state lands in the upper reaches of the east branch of the Milwaukee River located generally in Sections 17 and 20 of the Town of Mitchell, Sheboygan County, Wisconsin. A full hearing on the matter was held on October 25, 1978 following the issuance on October 24, 1978 of a temporary injunction and an order to show cause why Dwyer should not be permanently enjoined from continuing a dredging operation.

At the hearing, it was determined that Dwyer owns property in Sections 17 and 20 of the Town of Mitchell which abuts the Kettle Moraine State Forest. A stream, which forms the upper reaches of the east branch of the Milwaukee River, is located in the Southeast Quarter of the Southwest Quarter, S17-T14N-R20E, and travels in a generally southerly direction over the Northeast Quarter of the Northwest Quarter, S20-T14N-R20E, where it turns and travels in a southwesterly direction as it crosses into the state forest.

Testimony indicated that the stream is overgrown with vegetation and silted for a distance of about one half mile from where it crosses into the state forest until it passes under the Butler Lake Road. It was undisputed that this condition hampered the drainage of the stream and Dwyer's farmland and that, at the time of the hearing, 129.9 acres of Dwyer's land were too wet to permit the operation of farm equipment.

In 1974, Dwyer sought permission from the State Department of Natural Resources (DNR) to allow him to dredge the stream in this area to form a drainage ditch approximately forty feet wide to improve the drainage of his land. This request was never officially granted or denied.

Walter Adams, the Superintendent of the Kettle Moraine State Forest, Northern Unit, testified that on or about October 19, 1978, he observed a dredging operation on the upper reaches of the stream which he learned was being done at the direction of Dwyer. Dwyer testified that to improve the drainage of his land he contracted to have the stream dredged of vegetation and bottom silt to a width of 13'8" from the bridge to where it entered the state forest. This figure corresponds to the width of the stream at the Butler Lake Road bridge. At the time of the hearing, approximately 2,200 feet had been dredged with all materials being left along the stream bank. These materials included clay and sand from the stream bed as well as silt and bottom sediments.

The court found sec. 88-90 (3), Stats., which permits a person to go upon someone else's land to remove natural obstructions in a watercourse without being liable for trespass, does not waive the requirement of sec. 30.20 (1) (b), Stats., that he obtain a permit from the DNR. It then issued an order granting the permanent injunction.

Dwyer appeals from this order. He argues primarily that sec. 30.20, Stats., gives the DNR jurisdiction only over navigable streams and since no determination on navigability has been made in this case, the permit requirement cannot be said to apply. We disagree.

[1]

Section 30.20 (1) (b), Stats., reads, "No person shall remove any material from the bed of any lake or stream not mentioned in par. (a) without first obtaining a permit from the department under sub. (2) (c)." Paragraph (a) refers only to navigable lakes and outlying waters of the state. Therefore, by the plain language of the statute, paragraph (b) must cover non-navigable lakes and navigable and non-navigable streams.

[2]

The defendant contends the titles to Chapter 30 and sec. 30.20, Stats., include only navigable waters and, therefore, the permit requirement applies only to navigable lakes and streams. We cannot accept this contention. Such titles are not a part of the statutes. Sec. 990.001 (6), Stats. Furthermore, while a title may be used to help resolve an existing doubt about a statute's meaning, it may not be used to create the doubt. *Wisconsin Valley Improvement Co. v. Public Service Commission*, 9 Wis.2d 606, 618, 101 N.W.2d 798, 804 (1960). Because the clear language of sec. 30.20(1) (b), Stats., requires a permit for dredging non-navigable streams, there is no need to consider the titles.

Thus, it becomes unimportant whether the stream in question is or is not navigable. The question narrows down to whether see. 88.90 (3), Stats., supersedes see. 30.20 (1) (b), Stats., and allows the removal of natural obstructions from a waterway without a permit.

Section 88.90 (3), Stats., states:

Whenever any natural watercourse becomes obstructed through natural causes, the owner or occupant of any lands damaged by the effect which the obstruction has upon the flow of the water may go upon the land where the obstruction is located and remove it at his own expense. Such person is not guilty of trespass for entry upon the land but is liable for damage caused to crops or structures. The rights and privileges conferred by this subsection also extend to the agents or employees of the person causing the obstruction to be removed.

This statute certainly fits the situation in which Dwyer finds himself. Nevertheless, while the statute protects him from being charged with trespass for going on another's land to remove an obstruction from a waterway, it does not waive other applicable statutory requirements. Section 30.20, Stats., is such a requirement.

The statement of policy and purpose for the DNR with regard to water resources is found in see. 144.025 (1), Stats. In part it states: "The department of natural resources shall serve as the central unit of state government to protect, maintain and improve the quality and management of the waters of the state, ground and surface, public and private." In order to comply with this purpose in the area of dredging lakes and streams, the DNR must have some means to regulate and control such operations. Section 30.20, Stats., provides the needed control.

[3]

Section 88.90 (3), Stats., recognizes the right of a private landowner to protect his property from damage, yet sec. 30.20, Stats., recognizes this may not be done at the expense of the public interest in the waters involved. The statutes are not inconsistent when read together. They simply protect different interests. Consequently, before proceeding under see. 88.90 (3), Stats., to remove natural obstructions from waterways which are causing damage to one's land, a person must first obtain the necessary permit from the DNR under see. 30.20, Stats. In this way, both the interests of the individual landowner and the public are protected.

We do not imply the defendant's dredging of this particular stream is contrary to the public interest. It is not our place to make such a determination initially. However, were we to construe sec. 88.90 (3), Stats., as being totally independent of see. 30.20, Stats., and free of the permit requirement, it would allow dredging to occur at the unfettered discretion of individual property owners. While such discretion might be exercised wisely in most instances, the serious foreseeable harm from possible abuses militate against our adopting that position. The DNR must have some means to oversee necessary, and prohibit harmful, dredging operations.

[4]

This does not mean Dwyer cannot under any circumstances dredge the stream. It simply means he must seek the proper permit from the DNR. If the permit is denied, his remedy is then to seek administrative review.

*By the Court--Order affirmed.*



**CORRESPONDENCE/ MEMORANDUM****STATE OF WISCONSIN**

DATE: January 12, 2000

INSERT IN: Chapter 120 Water Regulation Guidebook

TO: Water Management Specialists Environmental Analysis and Review Specialists

FROM: Michael D. Staggs- Bureau of Fisheries and Habitat Protection  
James T. Addis- Bureau of Integrated Science Services

SUBJECT: RESPONSIBILITIES FOR REVIEW OF MULTI-REGION UTILITY LINES

Utility projects that cross two or more regions have the potential to involve many programs within the Department and thus will be coordinated by central office. Though most of the Department's jurisdiction for these projects falls within the fisheries and habitat protection program, there will likely also be other issues. As such, the environmental analysis and review program will help in coordination of the review.

Often a consultant or prospective applicant will call or write seeking guidance on what will be involved to permit or approve a utility line. Sometimes consultants will be seeking information for use in preparing proposals to act as agents for such projects. At this early stage, the consultants may seek preferences for certain routes from field personnel unfamiliar with the entire project. Department involvement at this stage should be limited to general guidance on permits, data needs for the review, and general requirements.

Later, an applicant will seek actual approval and/or permits to construct a project along a specific route. The permitting stage will necessitate site specific review which may involve Department suggested changes to minimize environmental damage. As a project goes to construction the Department will need to be involved in pre-construction meetings, inspections and enforcement (if necessary).

Coordination of Department involvement in these multi-region utility projects will be from the Central Office. The Bureau of Fisheries and Habitat Protection (FH) will coordinate waterway and wetland crossing reviews; the Bureau of Watershed Management (WT) will coordinate any necessary discharge permits (e.g., trench dewatering, stormwater); the Bureau of Integrated Science Services (SS) will coordinate any input from the Environmental Analysis program; and all endangered species review will be handled by the Bureau of Endangered Resources (BER). SS (EAL Section) in central office will act as the point of contact for the entire project.

**Process for Initial Contact/Pre-Application Stage of Involvement:**

1. FH or SS will receive the initial contact letter or call from an applicant. Other Department staff that get contacted on a project should refer the person to the central office.
2. SS will put together a response letter (see attachment 1) that explains permit requirements, asks the company for detailed information, and provides the NHI data forms (and/or the NHI email address).
3. The letter will explain the various DNR permit requirements. In appropriate situations, the DNR may be able to issue one general waterway crossing permit for the entire project. The permit will list general and specific conditions including, but not limited to, erosion control specifications, prohibitions for driving vehicles in streams, requirements for pre-construction conferences, timing of construction, provisions for burning slash materials, and provisions for addressing "frac-outs" (directional bore blow-outs). To facilitate the review of the project, DNR will request from the applicant **six sets** of materials that includes:

- Map of the entire project with a brief description of the overall project and a preliminary construction schedule.
  - Detailed map (on USGS 15-minute quadrangle maps) of the proposed route in each county identifying and sequentially numbering (from east to west or north to south) each waterway crossing and each wetland crossing.
  - A table that lists: county; crossing number; waterway name (if applicable) and location; wetland location (if applicable); techniques to be used for each crossing (open trench, plow, directional bore, other); and any special information on proposed actions to avoid or minimize impacts to the waterway or wetlands
4. The letter will explain that a permit fee is required for utility projects traversing public waters and wetlands. If we issue a general permit, the fee will be \$1000. If trenching is proposed for any crossing, the permit fee will be an additional \$300 for each trench crossing.
  5. The applicant will also need to seek review input regarding endangered and threatened species. The initial letter will include a copy of the NHI data request form and an explanation of the costs for NHI review.

#### **Application and Project Review:**

1. The application materials will be sent to either FH or SS, who will forward copies to the other. If NHI Request forms are part of the package, SS will forward to BER.
2. Waterway/wetland permitting will be coordinated by FH. The review of waterway crossings will be conducted on a county-by-county basis by field staff. Review information will be transmitted to central office for inclusion in one general permit.
3. For review of the non-waterway sections of a project, Regional EA staff may have to coordinate with other specialists (e.g. real estate, trails, forestry, wildlife managers) to compile information for recommending route changes or construction restrictions. This information should be submitted by the Regional EA staff to the SS central office staff for inclusion in the general permit. All submittals can be via e-mail.
4. ER review of inter-regional projects will be conducted by BER. BER will provide the review information and recommendations to SS staff who will act as the liaison to FH.
5. FH will take the lead in review, will coordinate requests for any additional information and/or will coordinate the final general permit for the project.

#### **Pre-Permitting Review**

For some projects, it may be advantageous to provide an initial review of major route alternatives' before getting into actual permitting review. Based on preliminary information provided by an applicant, EA staff can coordinate recommendations and "red flag" analyses to provide comments to the applicant in advance of submittal of the formal permit application. Such effort can help an applicant avoid and minimize potential impacts. If this step is included, Regional EA staff will coordinate input from water management specialists in addition to other specialists in the region. SS will coordinate the actual letter or communication of concerns to the applicant.

#### **Construction Phase Involvement:**

The general permit will include conditions for a pre-construction meeting and for establishment of company contact persons. The pre-construction meeting should be attended by any program person that issued permits (in most cases the water management specialist), EA staff, DNR property manager (if DNR land being crossed or affected), and others as appropriate. The company (not the contractor) must establish a responsible person, who will be the primary contact with the Department. For long projects, it may be advantageous to have different contacts for discrete portions of the project.

Inspections will be the primary responsibility of the permit issuer. At the pre-construction meeting (or as a permit condition), DNR may want to ask for regular updates from the primary contact person that list planned activities for the near future. For example, we may want weekly reports as to when waterway crossings will occur, so field staff can plan inspections accordingly. Central office (SS) should receive copies of inspection reports and can coordinate enforcement or other involvement as necessary.

**Annual review of this guidance**

Central office staff will meet annually to discuss how the guidance has worked and to establish changes for the following year. The meeting will involve FH, SS, ER, LE and WT staff. Prior to the meeting, the central office staff will query their regional counterparts for input.

## SAMPLE CONTACT LETTER

CONSULTANT OR COMPANY REP

Address

SUBJECT: Fiber Optic Cable

Dear

This letter is in response to your letter (call) of \_\_\_\_\_ regarding a proposed fiber optic cable line from XXXXXXXXXXXXXXX to XXXXXXXXXXXXXXX. Since the proposed project crosses of our Department's regions, coordination of the review will be through the central office in Madison.

Projects of the sort described in your letter may affect waterways, wetlands, important natural areas, public recreation lands, and rare/endangered/threatened and special concern species or communities. Often our concerns relate to impacts from the vehicles used for line placement and erosion/sedimentation impacts associated with any excavation or land clearing work.

State pen-nits or approvals may be required for waterway and/or wetland crossings. We will issue one general waterway/wetland crossing permit for the entire project. The review of waterway crossings will be conducted on a county-by-county basis by field staff in our regional offices with the complete project review coordinated through the central office. The permit will list general and specific conditions including, but not limited to, erosion control specifications, need for a primary contact person during construction and timing for construction activities. Driving vehicles in or across streams is prohibited unless otherwise authorized in the permit.

To facilitate the review of your project, six sets of the required materials must be provided before we can consider the application complete. Please organize the information by county that includes:

1. Map of the entire project for this permit application with a brief description of the overall project.
2. Detailed map of the proposed route in that county identifying and sequentially numbering (from east to west or north to south) each waterway crossing and each wetland crossing.
3. A table that lists: crossing number, waterway name (if applicable) and location; wetland location; technique to be used for crossing (open trench, plow, directional bore, other); and any special information on proposed actions to avoid or minimize impacts to the waterway or wetlands

Permit fees are required for utility projects traversing public waters and wetlands. The permit fee for one general permit involving multiple waterway and wetland crossings is \$1000. If, however, open trenching is proposed for any waterway or wetland crossing, the permit fee will be \$300 for each trench crossing.

To facilitate a review of potential impacts to rare/endangered/threatened and special concern species or communities, a submittal of the attached form is required. This information is used by Bureau of Endangered Resources staff to conduct a review using the Natural Heritage Inventory database. The fee is \$20 per hour, with a minimum of \$60, and the invoices will be sent out upon completion of the review.

In addition to DNR authorities, the project may be subject to Corps of Engineers (COE) jurisdiction, local zoning ordinances and other state authority of the Public Service Commission and the State Historical Society. At a minimum, we suggest you provide a copy of your proposal to the COE and County zoning offices.

Thank you for your inquiry. Please feel free to call with any further questions.

Sincerely yours,

David R. Siebert  
Environmental Analysis and Liaison Section  
Bureau of Integrated Science Services  
(608) 264-6048

Dale Simon  
Rivers and Regulations Section  
Bureau of Fisheries and Habitat Protection  
(608) 267-9868

Attachment (NHI Request Form)

# THE STATE OF WISCONSIN APPROVAL PROCESS FOR DREDGING OF COMMERCIAL PORTS GUIDANCE FOR APPLICANTS AND WDNR STAFF



## **WISCONSIN DEPARTMENT OF NATURAL RESOURCES**

Scott Hassett, Secretary

Wisconsin Department of Natural Resources Box 7921 Madison, WI 53707-7921

**Publication No. PUB - FH - 061 - 2004**  
**February, 2004**



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## Acknowledgments:

The collaborative efforts of the Wisconsin Commercial Ports Association (WCPA) are greatly appreciated. Thanks also for the constructive comments from reviewers within the WDNR and the WCPA.

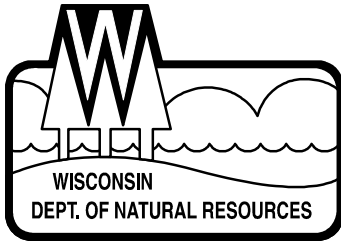
The following WDNR workgroup members were the principal authors of this document.

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**Legal Notice and Disclaimer:** *This document is intended solely as guidance, and does not contain any mandatory requirements (except where requirements found in statute or administrative rule are referenced). This guidance does not establish or affect legal rights or obligations, and is not finally determinative of any of the issues addressed. This guidance does not create any rights enforceable by any party in litigation with the State of Wisconsin or the Department of Natural Resources. Any regulatory decisions made by the Department of Natural Resources in any matter addressed by this guidance will be made by applying statutes and administrative rules to the relevant facts.*

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*This publication is available in alternative format (large print, Braille, audio tape. etc.) upon request. Please contact the publications coordinator, Bureau of Fisheries Habitat and Protection, for more information*



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Scott Hassett, Secretary

February 12, 2004

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Wisconsin Commercial Ports Association  
2561 S. Broadway  
Green Bay, WI 54304

Dear Mr. Haen:

**I am pleased to transmit the guidance document entitled "The State of Wisconsin Approval Process for Dredging of Commercial Ports" to the Wisconsin Commercial Ports Association (WCPA). This document is the result of an effort by the WCPA and the Wisconsin Department of Natural Resources (WDNR) to improve the process of obtaining approval to complete navigational dredging needed for our commercial ports. As you know, this process began nearly two years ago when your organization contacted us and asked us to work with you and other interested parties on the dredging, disposal and beneficial reuse aspects of navigational dredging projects in Wisconsin. We appreciate the time and effort that your organization put forth.**

This step by step guide will improve the process by which commercial ports can apply for approval for dredging projects. In addition, the appointment of a project manager for each commercial port dredging project and the appointment of a regional dredging project coordinator and in each of our Regions with commercial ports will further facilitate the review and approval process.

Enclosed with this letter are 15 copies of this guide for distribution to members of your organization. I am also transmitting this document to staff within the WDNR that are involved in the approval process for navigational dredging. We will have this document available on the WDNR Website.

Thank you for working so closely with us on this effort. We would appreciate continuing dialogue and any feedback as this guidance is implemented. Please contact, Greg Hill, our statewide dredging coordinator, at 608-267-9352 with any questions you may have regarding this transmittal or other dredging issues.

Sincerely,

Scott Hassett, Secretary



# THE STATE OF WISCONSIN APPROVAL PROCESS FOR DREDGING OF COMMERCIAL PORTS

## GUIDANCE FOR APPLICANTS AND WDNR STAFF

**JANUARY, 2004**

### Introduction and Purpose

Navigational dredging of sediment at Wisconsin's 13 major commercial ports is a necessary activity in order to maintain the ability of these facilities to provide a corridor to handle the nearly 40 billion dollars of liquid and dry freight that are essential to the state's economy. Each year in Wisconsin there's a need to remove approximately 1 million cubic yards of sediment from our navigational channels. Dredging of this sediment and the management of the material removed requires a major work effort for Wisconsin's commercial ports.

State law requires the Wisconsin Department of Natural Resources (WDNR) to evaluate the environmental impacts of the dredging of the sediment and grant the necessary permits and approvals before dredging can take place. It is in the best environmental and economic interests of the state to maintain a consistent and timely review process of these dredging projects.

This guidance document is the culmination of nearly two years of workgroup meetings between the Wisconsin Commercial Ports Association and the WDNR to improve the process of obtaining permits and approvals for navigational dredging.

### **Applicability**

This document is intended to cover navigational dredging for shipping cargo and freight in Wisconsin's commercial ports. It is intended to include dredging in the main navigational channel as well as dredging from the main navigational channel to a particular commercial shipping dock within the commercial port. Although some portions of the guidance (e.g. statewide, regional and project coordinators) are not applicable to other dredging projects, the guidance may prove useful for other projects such as marinas and recreational boating that require the removal of sediment from Wisconsin's waters. This guidance only describes WDNR state approvals and does not cover any federal or local approvals that may be required for a particular project. This guidance is not directly applicable to U.S. Army Corps of Engineers dredging of commercial ports on the Mississippi River because s. 30.202, Stats., authorizes a separate process under a Memorandum of Understanding (MOU) for disposal of

materials dredged by the Corps of Engineers from the Mississippi, St. Croix and Black rivers. Although this document does not apply directly to dredging projects authorized under s. 30.202, Stats., parts of this guidance may be cited in administration and future revision of the MOU.

## Background

In November 2001 the Wisconsin Commercial Ports Association (WCPA) and former WDNR Secretary Darrell Bazzell met to discuss concerns of the WCPA regarding WDNR's review of applications regarding sediment from dredging of commercial ports. Based upon the discussions at that meeting, WDNR agreed to establish a liaison to interface with the WCPA, to identify a person in each WDNR Region, with a commercial port to serve as the initial point of contact for all dredging projects in that Region. In addition, former Secretary Bazzell agreed to convene a group of Department staff to develop guidance in a workgroup setting with WPCA representatives.

The discussions between WDNR and WCPA representatives resulted in identification of key elements for improving the process of obtaining approval by the WDNR to dredge in Wisconsin's commercial ports.

## Key Elements for an Improved Process

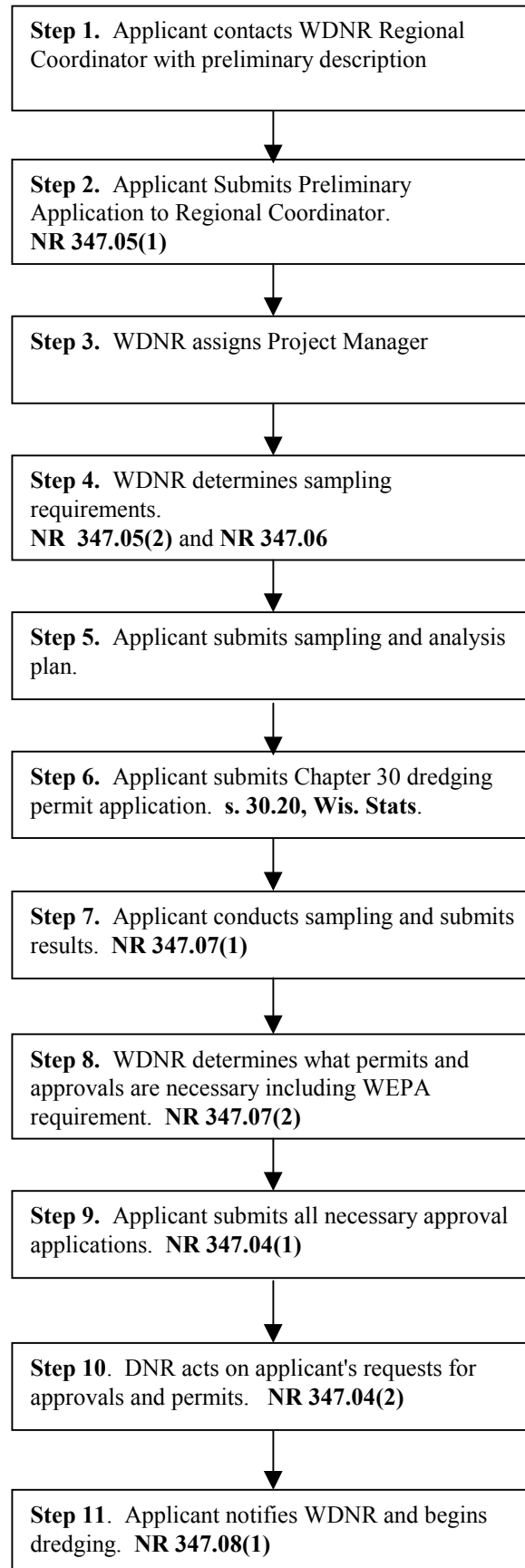
This document describes the step by step process to be used by WDNR staff and dredging project applicants. This step by step process emphasizes certain key elements identified in those discussions between the WDNR, WCPA, and other parties outlined above. These elements include:

1. Early contact of WDNR by applicants, timely and complete submittals of information and applications to WDNR and subsequent timely reviews of dredging requests by WDNR.
2. Effective communication by all parties throughout the process from initial project contact by the applicant to the actual completion of the dredging and disposal or beneficial reuse efforts.
3. A clear understanding of the roles and responsibilities of each of the parties throughout the project.
4. The appointment of a WDNR project manager for each dredging project to ensure coordination of project review across all programs within the WDNR.
5. Documentation of the process for submittal, review, and approval to assure consistency in the review of each project.

Each of these elements is explained in more detail in the step by step process described in the remainder of this guidance.

## Flow Chart

### The State of Wisconsin Approval Process for Dredging of Commercial Ports



## **Step - by - Step Description of the Process**

### **The 11-Step State of Wisconsin Approval Process for Dredging of Commercial Ports**

#### **Step 1 Commercial Port Applicant Makes Informal Contact With WDNR Regional Coordinator.**

This step is strongly encouraged to promote early communication between the applicant and the WDNR. WDNR has assigned an overall coordinator for commercial port dredging projects in each WDNR region that has commercial ports. The regional coordinator has overall cross program coordination responsibility for the commercial port dredging program in that region. See Appendix 2 for a description of the responsibilities of the regional coordinator. This step is intended to be a very informal contact (which may be by telephone) to let the WDNR regional coordinator know that a dredging project will be proposed and that a preliminary application will be forthcoming (Step 2). This contact allows the applicant and the regional coordinator to discuss project timing, proposed disposal or beneficial reuse methods, informational requirements for the preliminary application, and go over any questions.

#### **Step 2 Applicant Submits Preliminary Application Per NR 347.05(1).**

S. NR 347.05(1)(a)-(g), Wis. Adm. Code, lists the information that is required for a Preliminary Application. The Preliminary Application should be submitted to the regional coordinator for commercial port projects. The information that is required for a preliminary application includes:

- (a) Volume of material to be dredged;
- (b) Name of waterbody and location of project;
- (c) Brief description of dredging method and equipment;
- (d) Brief description of proposed disposal method and location and, if a disposal facility is to be used, size of the disposal facility;
- (e) Any previous sediment sampling (including field observations) and analysis data from the area to be dredged or from the proposed disposal site;
- (f) Copy of a map showing the area to be dredged, the depth of cut, specific location of the proposed sediment sampling sites and the bathymetry of the area to be dredged; and
- (g) Anticipated starting and completion dates of the proposed project.

It's important that all required information is included in the preliminary application so that unnecessary delays are avoided in later steps of the process.

**Step 3        WDNR Assigns a Project Manager and Notifies the Commercial Port Applicant.**

WDNR will assign a project manager for each dredging project involving a commercial port. The project manager has responsibility for overall cross program coordination within WDNR for all aspects of that particular dredging project. See Appendix 2 for further description of the responsibilities of project managers. WDNR Regions are encouraged to assign a project manager following step 1 if possible, but in any case the expectation is that WDNR should assign a project manager and notify the applicant within 10 business days of receipt of the preliminary application.

**Step 4        WDNR Determines Sampling Requirements and the Notifies**

**Applicant Per NR 347.05(2) and NR 347.06.** From existing data, WDNR must determine whether there is reason to believe that any sediment contamination exists within the proposed project area. If there is reason for concern about potential contamination, WDNR conducts a coordinated cross-program review and determines all in-situ sediment sampling that will be required. S. NR 347.05(2), Wis. Adm. Code, requires WDNR to notify the applicant of the sampling requirements within 30 business days of receipt of the Preliminary Application submitted in Step 3. This written notification will include a requirement for the submittal of a Sampling and Analysis Plan. Further details about sampling requirements and how WDNR makes decisions regarding sampling are contained in the WDNR internal guidance document entitled "Guidance for Applying Chapter NR 347, Wisconsin Administrative Code, To Dredging Projects In Surface Waters."

**Step 5        Applicant Submits and WDNR Reviews the Sampling and Analysis Plan.**

If sampling requirements are established in Step 4, the submittal of a Sampling and Analysis Plan will be required. The Sampling and Analysis Plan allows WDNR a review of the sampling proposal for compliance with NR347 requirements prior to the sampling commencing. The expectation is that the WDNR review and response to the Sampling and Analysis Plan will occur very quickly. For commercial port dredging projects, the target for WDNR response is within 10 business days.

**Step 6        Applicant Submits the Chapter 30 Dredging Permit Application.**

An applicant could delay submittal of the permit application under Chap. 30, Wis. Stats, until being notified of the need for this permit under s. NR 347.07(2), Wis. Adm. Code (Step 8). However, a Chap. 30 dredging permit is always required and submittal of the application at this point is strongly encouraged. An early submittal of the Chapter 30 dredging permit application provides the WDNR with a better understanding of the project and allows a more efficient and expedited project review.

**Step 7        Applicant Conducts Sediment Sampling and Submits Sampling Results Per NR 347.07(1).**

In accordance with s. NR 347.07(1), Wis. Adm. Code, when the sampling has been completed and the results are available, the applicant submits a copy of the testing report to the WDNR. The sampling report contents are described in NR 347.07(1) and must include the raw data, a map of the project area showing all specific sampling locations, laboratory quality control and quality assurance information including analytical methods, detection limits and quantitation limits. The applicant may submit the Chapter 30 dredging permit application (Step 6) in conjunction with this report if it has not been previously submitted.

**Step 8 WDNR Determines What Permits and Approvals are Required and Whether Additional Information is Needed from the Applicant.** Based upon the information submitted under Steps 6 and 7, WDNR identifies which of the approvals listed in s. NR 347.04(1) will be necessary for the particular project. In addition, per NR 347.07(2) and (3), WDNR must also determine whether additional information and sampling is necessary. Finally, WDNR must also make a Wisconsin Environmental Policy Act (WEPA) determination under Chap. NR 150 regarding the need for an Environmental Assessment (EA) or an Environmental Impact Statement (EIS). The WDNR determination and the notification to the applicant must be completed within 30 business days of the submittal of the sampling results under Step 7. The applicant should submit any required additional information or sampling results before or at the time of proceeding to Step 9.

See Appendix 3 for descriptions of permits and approvals that may be needed for dredging projects. Also see s. NR 347.07 for a list permits and approvals that may be required.

**Step 9 Applicant Submits All Necessary Applications for Permits and Approvals Per NR 347.04(1).** Based upon the determinations made in Step 8, the applicant must apply for all necessary WDNR permits and approvals. If the applicant has not already submitted the Chapter 30 dredging permit application under Step 6, he or she must do so as part of this step. Statutory deadlines and processes specific to each permit or approval apply. The WDNR objective is a timely and coordinated cross program review of all applications.

For commercial port projects, the WDNR project manager is responsible for overall coordination and should be contacted and kept informed regarding any problems or questions related to the project. The WDNR project manager should receive copies of all correspondence related to the project and copies of any permits and approvals. Proactive informal communication between the applicant and the WDNR is encouraged so that there are no unexpected delays in the review process.

See Appendix 3 for descriptions of permits and approvals that may be needed for dredging projects. Also see s. NR 347.07 for a list of permits and approvals that may be required.

**Step 10      WDNR Makes Approval and Permit Determinations and Notifies Applicant Per NR 347.04(2).**    WDNR prepares an NR 150 environmental review document if required and issues decisions for each application submitted under Steps 6 and 9. Statutory deadlines and processes specific to each permit or approval apply. Except as otherwise provided by law, the WDNR decisions on permits and approvals should be made concurrently with the NR 299 Water Quality Certification or the permit under Chap. 30, Wis. Stats. per NR 347.07(2).    An opportunity for a public hearing(s) or public informational meeting may be required during this step before the WDNR can issue some types of permits or approvals.

**Step 11      Applicant Notifies WDNR Per NR 347.08(1) and Begins Dredging.**  
After all permits and approvals are granted, the applicant is required under NR 347.08(1) to notify the WDNR at least 5 days prior to the time that dredging is to begin.

# Appendix 1

## Chapter NR 347, Wis. Adm. Code

Unofficial Text (See Printed Volume). Current through date and Register shown on Title Page.

Register, January, 2002, No. 553

### Chapter NR 347

### SEDIMENT SAMPLING AND ANALYSIS, MONITORING PROTOCOL AND DISPOSAL CRITERIA FOR DREDGING PROJECTS

NR 347.01 Purpose and policy.

NR 347.02 Applicability.

NR 347.03 Definitions.

NR 347.04 Permits, approvals and reviews required.

NR 347.05 Preliminary application and analytical requirements.

NR 347.06 Sampling and analysis.

NR 347.07 Review procedures and review criteria.

NR 347.08 Monitoring, reporting and enforcement.

**Note:** Chapter NR 347 as it existed on February 28, 1989 was repealed and new chapter NR 347 was created effective March 1, 1989.

**NR 347.01 Purpose and policy.** (1) The purpose of this chapter is to protect the public rights and interest in the waters of the state by specifying definitions, sediment sampling and analysis requirements, disposal criteria and monitoring requirements for dredging projects regulated under one or more of the following statutes: s. 30.20, Stats., which requires a contract or permit for the removal of material from the beds of waterways; s. 281.41, Stats., which establishes a wastewater treatment facility plan approval program; ch. 289, Stats., which establishes the solid waste management program; ch. 291, Stats., which establishes the hazardous waste program; and ch. 283, Stats., which establishes the Wisconsin pollutant discharge elimination system (WPDES) program.

(2) It is department policy to encourage reuse of dredged material and to minimize environmental harm resulting from a dredging project.

**History:** Cr. Register, February, 1989, No. 398, eff. 3-1-89; **corrections in (1) made under s. 13.93 (2m) (b) 7., Stats., Register January 2002 No. 553.**

**NR 347.02 Applicability.** The provisions of this chapter apply to the removal and disposal of material from the beds of waterways except where exempted by statute.

**History:** Cr. Register, February, 1989, No. 398, eff. 3-1-89.

**NR 347.03 Definitions.** (1) “Analyte” means the chemical substance or physical property being tested for in a sample.

(2) “Bathymetry” means the measurement of depth of water in lakes or rivers to determine lake or river bed topography.

(3) “Beach nourishment disposal” means the disposal of dredged material on the beaches or in the water landward from the ordinary high-water mark of Lakes Michigan and

Superior for the purpose of adding, replenishing or preventing erosion of beach material.

(4) “Bioassay” means a method for determining the acute or chronic toxicity of a material by studying its effects on test organisms under controlled conditions.

(5) “Bulk sediment analysis” means a test to measure the total concentration of a specific constituent in a sample being analyzed.

(6) “Carriage water” means the water portion of a slurry of water and dredged material.

(7) “Carriage water return flow” means the carriage water

which is returned to a receiving water after separation of the dredged material from the carriage water in a disposal, rehandling or treatment facility.

(8) “Connecting waterways” means a portion of a navigable lake or stream which is directly joined to Lake Michigan or Lake Superior and which contains a navigation channel providing access for commercial or recreational watercraft to Lake Michigan or Lake Superior.

(9) “Contamination” means a solid, liquid or gaseous material, microorganism, noise, heat, odor, or radiation, alone or in any combination, that may harm the quality of the environment in any way.

(10) “Contract” means a binding written agreement between the department and a dredging applicant authorizing the removal of material from the bed of a natural navigable lake or outlying water.

(11) “Department” means the department of natural resources.

(12) “Disposal facility” means a site or facility for the disposal of dredged material.

(13) “Dredged material” means any material removed from the bed of any waterway by dredging.



(14) “Dredging” means any part of the process of the removal of material from the beds of waterways; transport of the material to a disposal, rehandling or treatment facility; treatment of the material; discharge of carriage or interstitial water; and disposal of the material.

(15) “Grain size analysis” means a method to determine dredged material and disposal site sediment particle size distribution.

(16) “Hazardous waste”, as defined in s. 291.01 (7), Stats., means any solid waste identified as a hazardous waste under ch. NR 605.

(17) “Interstitial water” means water contained in the interstices or voids of soil or rock in the dredged material.

(18) “Limit of detection” means the lowest concentration level that can be determined to be statistically different from a k sample for that analytical test method and sample matrix.

(19) “Limit of quantitation” (LOQ) means the concentration of an analyte at which one can state with a stated degree of confidence for that analytical test method and sample matrix that an analyte is present at a specific concentration in the sample tested.

(20) “Parent material” means the native unconsolidated material which overlies the bedrock.

(21) “PCBs” means those materials defined in s. 299.45 (1) (a), Stats.

(22) “Particle size distribution” means a cumulative frequency distribution or frequency distribution of percentages of particles of specified diameters in a sample.

(23) “Rehandling facility” means a temporary storage site or facility used during the transportation of dredged material to a treatment or disposal facility.

(24) “Treatment facility” in this chapter means a natural or artificial confinement facility used for the separation of dredged material solids from the interstitial or carriage water.

(25) “Upland disposal” means the disposal of dredged materials landward from the ordinary high-water mark of a waterway or waterbody.

**History:** Cr. Register, February, 1989, No. 398, eff. 3–1–89; correction in (16) made under s. 13.93 (2m) (b) 7., Stats., Register, October, 1995, No. 478.

#### **NR 347.04 Permits, approvals and reviews**

**required. (1)** The following are the permit, approval and review requirements for dredging projects:

(a) Except where otherwise provided by law, all private and municipal dredging projects require a permit or contract under s. 30.20, Stats., and ch. NR 346. Dredging in portions of the Mississippi, St. Croix and Black rivers by the U.S. army corps of engineers is governed by s. 30.202, Stats.

(b) All dredging projects require review under ch. 289, Stats., and chs. NR 500 to 520 for disposal of dredged material under the solid waste management program.

(c) All dredging projects shall be reviewed under ss. 1.11 and 23.11(5), Stats., and ch. NR 150 for compliance with the Wisconsin environmental policy act.

(d) All federally funded, permitted or sponsored dredging projects require water quality certification under ss. 281.11 to 281.22 and 283.001, Stats., and ch. NR 299.

(e) A Wisconsin pollutant discharge elimination system

(WPDES) permit under ch. 283, Stats., is required for dredging projects with carriage water return flows to surface water or groundwater.

(f) Plan approval under s. 281.41, Stats., is required for dredging projects which include a dredged material treatment facility.

(g) Sites and facilities for the disposal of hazardous waste and PCBs require review under subch. IV of ch. 291, Stats. and s. 299.45, Stats., and chs. NR 500 to 520 and 600 to 685.

(2) The project application process shall be coordinated by the department. Except as otherwise provided by law, decisions on all applicable department approvals, permits, contracts and licenses relating to a dredging project shall be made concurrently and with the decision on:

(a) Water quality certification under ch. NR 299 for all federally funded, permitted or sponsored projects, or

(b) Permit or contract under s. 30.20, Stats., and ch. NR 346 for all other projects.

**History:** Cr. Register, February, 1989, No. 398, eff. 3–1–89; corrections in (1) made under s. 13.93 (2m) (b) 7., Stats., Register, October, 1995, No. 478.; corrections in (1) (b), (d), (e), (f), and (g) made under s. 13.93 (2m) (b) 7., Stats., Register January 2002 No. 553.

#### **NR 347.05 Preliminary application and analytical requirements.**

(1) Prior to submission of a formal application, anyone seeking to remove material from the beds of waterways shall provide the department with preliminary information including:

(a) Name of waterbody and location of project;

(b) Volume of material to be dredged;

(c) Brief description of dredging method and equipment;

(d) Brief description of proposed disposal method and location and, if a disposal facility is to be used, size of the disposal facility;

(e) Any previous sediment sampling (including field observations) and analysis data from the area to be dredged or from the proposed disposal site;

(f) Copy of a map showing the area to be dredged, the depth of cut, the specific location of the proposed sediment sampling sites and the bathymetry of the area to be dredged; and

(g) Anticipated starting and completion dates of the proposed project.

(2) An initial evaluation shall be conducted by the department within 30 business days after receipt of the information under sub. (1) to determine if there is reason to believe that the material proposed to be dredged is contaminated. This initial evaluation shall be used by the department in specifying sediment sampling and analysis requirements to the applicant under s. NR 347.06 and shall be accomplished with existing data. Factors which shall be considered by the department in its evaluation of the dredging site and, if appropriate the disposal site, include, but are not limited to, the following:

(a) Potential that contaminants may be present. Potential routes that may have introduced contaminants into the dredging site shall be identified by examining appropriate maps, aerial photographs, or other graphic materials that show surface water-courses and groundwater flow patterns, surface relief, proximity to surface and groundwater movement, private and public roads, location of buildings,

agricultural land, municipal and industrial sewage and stormwater outfalls, etc., or by making supplemental field inspections.

(b) Previous tests of the material at the dredging site or from other projects in the vicinity when there are similar sources and types of contaminants, water circulation and stratification, accumulation of sediments, general sediment characteristics, and potential for impact on the aquatic environment, as long as nothing is known to have occurred which would render the comparisons inappropriate.

(c) The probability of past introduction of contaminants from land runoff.

(d) Spills of toxic or hazardous substances.

(e) Introduction of contaminants from point sources.

(f) Source and previous use of materials used or proposed to be used as fill.

(g) Natural deposits of minerals and other natural substances.

(h) Any other relevant information available to the department.

**History:** Cr. Register, February, 1989, No. 398, eff. 3-1-89.

**NR 347.06 Sampling and analysis.** Upon completion of the initial evaluation, the department shall establish sampling and analysis requirements.

**(1) EXCEPTION.** Except as provided in subs. (3)(a) and (6), the applicant shall collect and analyze data on sediments to be dredged in the manner outlined in this section.

**(2) CORRECT METHODS.** Unless otherwise specified, sampling, sample handling and sample analysis to demonstrate compliance with this section shall be in accordance with methods from applicable sources enumerated in ch. NR 149.

**(3) NUMBER OF SAMPLES.** (a) Sediment sampling may be waived by the department if it determines from its review of available information under s. NR 347.05(2) that sediment contamination is unlikely.

(b) If available information is either insufficient to determine the possibility for sediment contamination, or shows a possibility for sediment contamination, the department shall require the applicant to collect sufficient samples to describe the chemical, physical and biological properties of the sediment. The exact number and location of sediment samples required and analyses to be conducted shall be specified by the department, in consultation with the applicant, based on the initial evaluation and on other factors including, but not limited to, the potential for possibility of contamination, volume and aerial extent of material to be dredged, depth of cut and proposed method of disposal.

(c) For a project involving the disposal of dredged material at an upland disposal site, the department may require samples to be taken from the proposed disposal site and analyzed for parameters found to be elevated in the dredged material sediment samples. The number and location of disposal site samples required shall be specified by the department based on the size and other characteristics of the site.

(d) For a project to be conducted in the Great Lakes with beach nourishment disposal, at least one sample every 250

linear feet of beach with a minimum of 2 samples shall be taken from the proposed beach nourishment disposal site and analyzed for particle size and color. Core or grab samplers may be used.

**(4) METHOD OF TAKING SAMPLES.** (a) All samples shall be taken with a core sampler except as provided in sub. (3)(d). The department may approve other sampling methods if it finds them to be appropriate.

(b) All sampling equipment shall be properly cleaned prior to and following each sample collection.

(c) Samples collected for PCB, pesticide and other organic analyses shall be collected and processed using metallic (stainless steel preferred) liners, tubs, spoons and spatulas. Samples collected for other chemical analysis, including heavy metals, shall be collected and processed using non-metallic liners, tubs, spoons and spatulas.

(d) Core samples from the dredging site shall be taken to the proposed dredging depth plus 2 feet.

(e) Core samples shall be visually inspected for the existence of strata formation, and a written description including position, length, odor, texture and color of the strata shall be provided to the department.

**(5) SAMPLE HANDLING AFTER COLLECTION AND PRIOR TO ANALYSIS.** Sample handling and storage prior to analysis shall be in accordance with the maximum holding times and container types given in table F of ch. NR 219. Samples shall be preserved at the time of collection by cooling to 4°C.

**(6) ANALYSES TO BE PERFORMED ON SEDIMENT SAMPLES.** Analyses shall be done in accordance with methods from applicable sources enumerated in ch. NR 149. Analyses submitted to the department under this chapter shall be done by a laboratory certified or registered under ch. NR 149.

(a) Samples shall be analyzed from each distinct layer observed in the material to be dredged. If no strata formation exists, core samples shall be divided into 2-foot segments, and each segment shall be analyzed for the required chemicals and characteristics. For cores extending into parent material, analysis of only the top 2-foot segment of parent material is required. The department may approve other subsampling methods if it finds them to be appropriate.

(b) All samples shall be analyzed for those parameters listed in table 1 unless waived by the department as provided in par. (d). Elutriate testing may be required for all chemicals listed in Table 1 unless waived by the department as provided in par. (d).

(c) If previous sampling data or other adequate available information indicates the possibility of contamination by chemicals not listed in table 1, the department may require analysis for those chemicals.

(d) If previous sampling data or other adequate available information demonstrates that the possibility of contamination is negligible, analysis for any chemical may be waived, in writing, by the department.

(e) The department may require additional samples and analyses as specified by law or for other appropriate reasons.

TABLE 1

## ANALYSES TO BE PERFORMED ON SEDIMENT SAMPLES

	GREAT LAKES	INLAND WATERS
PCB (Total)	X	X
Total 2,3,7,8 TCDD	X	X
Total 2,3,7,8 TCDF	X	X

	GREAT LAKES	INLAND WATERS
Aldrin	X	X
Dieldrin	X	X
Chlordane	X	X
Endrin	X	X
Heptachlor	X	X
Lindane	X	X
Toxaphene	X	X
DDT	X	X
DDE	X	X
Arsenic	X	X
Barium	X	X
Cadmium	X	X
Chromium	X	
Copper	X	X
Cyanide	X	
Iron	X	
Lead	X	X
Manganese	X	
Mercury	X	X
Nickel	X	X
Selenium	X	X
Zinc	X	X
Oil and Grease	X	X
NO <sub>2</sub> , NO <sub>3</sub> , NH <sub>3</sub> -N, TKN	X	X
Total P	X	X
Grain-size	X	X
Percent Solids	X	X
Total Organic Carbon	X	X
Moisture Content	X	X
Settleability (if return water)	X	X

**History:** Cr. Register, February, 1989, No. 398, eff. 3-1-89; am. (5) and (6) (intro.), Register, November, 1992, No. 443, eff. 12-1-92.

### **NR 347.07 Review procedures and review criteria.**

**(1)** When sediment sampling and analyses have been completed, the applicant shall submit a copy of the testing report to the department. This report shall include raw data for all analyses, a map of the project area showing the specific locations of sediment sampling sites and the name and address of the laboratory which performed the tests.

All testing and quality control procedures shall be described and analytical methods, detection limits and quantification limits shall be identified.

**(2)** The department shall review the information submitted under sub. (1) within 30 business days after receipt and determine the applicable statutory and administrative rule provisions and any additional information required from the applicant under this section.

**(3)** Based on the submitted testing report the department may after consultation with the applicant require additional

sediment sampling and analyses when there is evidence of contamination.

**(4)** For projects in the Great Lakes involving beach nourishment disposal, grain-size analysis results of the proposed dredged material and the beach shall be compared by the department.

(a) The department may allow beach nourishment disposal if:

1. The average percentage of silt plus clay (material passing a #200 sieve or less than .074 mm dia.) in the dredged material does not exceed the average percentage of silt plus clay in the existing beach by more than 15% and the color of the dredged material does not differ significantly from the color of the beach material.

**Note:** For example, if the silt plus clay content of the existing beach is 10%, suit-able dredged material must have a silt plus clay content of less than 25%.

2. The criteria of any general permit regulating wastewater discharges under the Wisconsin pollutant discharge elimination system is not exceeded.

(5) For all projects where upland disposal is required or planned, the results of sediment sampling and analysis shall be compared by the department to the solid waste disposal standards and criteria specified in chs. NR 500 to 520.

(6) If the bulk sediment analysis criteria in sub. (4) is exceeded, the applicant shall have the option of demonstrating to the department through use of bioassay, or other methods approved by the department, that the dredging and sediment disposal operations will have minimum effects on the environment.

**History:** Cr. Register, February, 1989, No. 398, eff. 3-1-89; correction in (5) made under s. 13.93 (2m) (b) 7., Stats., Register, October, 1995, No. 478.

#### **NR 347.08 Monitoring, reporting and enforcement.**

(1) **SURVEILLANCE.** (a) The permittee shall contact the department 5 business days prior to the commencement of dredging to provide an opportunity for the department to review all required environmental safeguards to ensure they are in place and operable.

(b) The department may inspect the dredging project at any time during operation to determine whether requirements of permits and approvals are being met or to conduct effluent sampling.

(2) **MONITORING.** (a) For those projects authorized in part by a WPDES permit, monitoring, analyses and reporting shall be performed as specified in the WPDES permit.

(b) For all other projects, monitoring, analyses and reporting shall be performed as specified in ss. NR 347.06(2) and 347.07(1).

(c) Project characteristics to be monitored may include, but are not limited to, carriage water return flow, total suspended solids, dissolved oxygen concentrations, effluent and receiving water temperatures, receiving stream flow rates, effluent ammonia-ni-trogen concentrations, and pH.

(3) **SUSPENSION OF WORK.** If the department determines that

project performance is not in compliance with permit or contract conditions, the permittee shall suspend work upon written notification from the department. This shall be a condition of any permit or contract issued by the department. The permittee shall be accorded an opportunity for hearing in accordance with s. 227.51(3), Stats. The issuance of a suspension order under this subsection shall not limit other enforcement actions or penalties. The department and permittee shall analyze operational deficiencies and the department shall prescribe changes necessary to bring project operation into conformance with permit or contract conditions.

(4) **PENALTIES.** (a) Each violation of the conditions of a permit or contract issued under s. 30.20, Stats., or this chapter, may result in a forfeiture of not less than \$100 nor more than \$10,000 for the first offense and shall forfeit not less than \$500 nor more than \$10,000 upon conviction of the same offense a second or subsequent time. The permit or contract may be rescinded and appropriate restoration orders may be issued as authorized by ss. 23.79, 30.03, 30.12, 30.15, 30.20, 30.292, 30.294 and 30.298, Stats.

(b) The enforcement provisions of s. 283.91, Stats., shall apply to any violations of WPDES permits associated with dredging projects.

(c) The enforcement provisions of ss. 289.97 and 299.97, Stats., and chs. NR 500 to 520 shall apply to violations of solid waste management approvals for this chapter.

(d) The enforcement provisions of ss. 291.95 and 291.97, Stats., shall apply to violations of any hazardous waste approvals for disposal activities associated with dredging projects authorized by this chapter.

**History:** Cr. Register, February, 1989, No. 398, eff. 3-1-89; corrections in (4) made under s. 13.93 (2m) (b) 7., Stats., Register, October, 1995, No. 478; corrections in (4) (b) to (d) made under s. 13.93 (2m) (b) 7., Stats., Register January 2002 No.

## **Appendix 2**

### **WDNR Staff Roles and Responsibilities for Commercial Port Dredging Projects**

#### **1) Statewide Coordinator**

The WCPA has requested that the WDNR name an overall statewide coordinator for commercial port dredging projects. The role of the statewide coordinator is:

- To assure consistency in implementation of WDNR policy and guidance;
- To serve as liaison with the WCPA on statewide issues related to commercial ports dredging projects;
- To communicate and coordinate across WDNR program lines statewide commercial port dredging issues; and
- To represent the WDNR in interactions with federal agencies and other states.

The statewide coordinator should be consulted on statewide cross program issues, on issues related to consistency between regions, or on implementation of statewide policy.

Note: As of the date of publication of this guidance, Greg Hill is the designated Statewide Coordinator for commercial port dredging projects. Contact: Greg Hill; Greg.Hill@dnr.state.wi.us 608-267-9352.

#### **2) Regional Coordinators**

At the request of WCPA, the WDNR has named a regional coordinator for commercial port dredging for each WDNR region with commercial ports. The responsibility of the regional coordinator is to assure consistency and cross-program coordination on commercial port dredging issues within that WDNR region and to represent the region on statewide issues. The regional coordinator should be the initial point of contact before a project manager is named for a particular project. The regional coordinator may also be contacted if there is a question or dispute that cannot be resolved with the project manager.

The regional coordinator will contact the regional Water Leader and the regional Air and Waste (AW) Leader within that WDNR region when there is a need for a project manager to be named. The regional coordinator may recommend the name of a project coordinator to the regional AW and Water leaders.

Note: As of the date of this publication, the following persons were designated as a Regional Coordinator for commercial port dredging projects.

Northern Region: Duane Lahti, NOR Watershed Management Program

Duane Lahti@dnr.state.wi.us 715-395-6911

Southeast Region: Rob Grosch, SER Waste Management Program

Robert.Grosch@dnr.state.wi.us 262-574-2148

Northeast Region: Kristy Rogers, NER Aquatic Habitat Coordinator

### **3) Project Managers**

Whenever a commercial port dredging project is proposed, the WDNR Region will name a project manager for that project and inform the applicant within 10 days of receipt of the preliminary dredging application (Step 3 of the 11-step process). The project manager's role is cross-program coordination and communication on all aspects of the proposed project. The project manager is the principal liaison between the applicant and the WDNR. When approvals or permits are needed, direct communication between the applicant and the lead WDNR reviewer for a particular permit or approval is encouraged, however the project manager should receive copies of all correspondence and should be kept fully informed and apprised of communications and progress on the project.

## **Appendix 3**

### **Descriptions of Permits, Approvals and Other Requirements That May Apply to Dredging Projects**

#### **A. Chapter 30 Dredging Permits.**

All projects that involve dredging or removing bottom material from the bed of a waterway require a Dredging Permit under section 30.20, Wisconsin Statutes. Applicants submit preliminary plans that show the location, extent and volume of proposed dredging, along with the proposed disposal site or beneficial reuse option. DNR staff identify any sediment sampling requirements needed to determine if the sediment is contaminated, and the applicant conducts sampling. When a final permit application is received, DNR staff evaluate the impacts of proposed dredging and disposal on wetlands, fish and wildlife habitat, and on other public rights in navigable waters, including navigation. If the project involves 3000 cubic yards or greater of material to be dredged, DNR prepares an Environmental Assessment to evaluate the project in greater detail. A Dredging Permit is granted if DNR determines that the work can be done, perhaps with certain permit conditions, in a manner that will not harm public rights in Wisconsin waters.

#### **B. Wastewater Treatment Facility Plan Review**

If a dredging project includes a dredged material treatment facility, the facility may not be constructed or operated unless the plans and specifications for the proposed facility have been reviewed and approved by the WDNR. Procedures for submission of plans and specifications for wastewater treatment facilities are contained in Chapter NR 108, Wis. Adm. Code. According to s. 281.41(1)(b), Wis. Stats., the WDNR must review and approve or deny the plans and specifications within 90 days following their receipt.

#### **C. WPDES - Wastewater Discharge Permits.**

A Wisconsin Pollutant Discharge Elimination System (WPDES) wastewater discharge permit is required under Chapter 283, Wis. Stats., and Chapter NR 200, Wis. Adm. Code, for a point source discharge of pollutants into the waters of the state. Wastewater discharge permits are applicable to dredging operations that discharge carriage and/or interstitial water, and small amounts of the dredged material resulting from the disposal or temporary storage.

##### **General WPDES Permit**

General Permit. In some cases, the removed sediment is essentially innocuous. Consequently, any return of water and small amounts of the dredged material from the

disposal site to waters of the state are also innocuous and can be covered by a Dredging Operations general permit (WPDES Permit No. WI-0046558-3).

Provisions have been included in the General Permit for the disposal of dredged sediments in Lake Michigan and Lake Superior via beach nourishment and unconfined disposal. These activities are defined as follows:

Beach nourishment: The disposal of dredged material on the beaches or in the water landward from the highwater mark of Lakes Michigan and Superior for the purpose of adding, replenishing or preventing erosion of beach material.

Unconfined disposal: The deposition of dredged sediments, in water, on the bed of a waterway. Typically, state law prohibits disposal of dredged sediments via unconfined disposal. However, unconfined disposal may be allowed where the lake bed in the dredged disposal area has been granted to a local government entity. See Sections 30.12(1), 30.202, 30.203, and 30.11, Stats.

Disposal via these means is allowed only if the following two conditions are met: the particle size of the dredged material must meet the requirements of s. NR 347.07(4)(a)1, Wis. Adm. Code and the dredged material must meet the background criteria for uncontaminated sediment identified in the General Permit - WPDES Permit No. WI-0046558-3.

### **Specific WPDES Permit**

Specific WPDES Permit. A Specific Permit is necessary in situations where there exists a possibility of violating surface or groundwater quality standards (NR 102, 105, 106, and 140). For situations where specialized environmental controls are necessary the discharge will be regulated by a specific permit. In general if bioaccumulating compounds are present, regulation of these substances requires a specific permit. Discharges to outstanding and exceptional resource waters requires a specific permit which provides the oversight and discharge limitations necessary to protect these types of receiving waters.

## **D. NR 299 Water Quality Certification**

Chapter 299, Wis. Adm. Code, contains procedures and criteria for application, processing and review of water quality certifications required by the Federal Water Pollution Control Act. A water quality certification is required for any federally funded, permitted or sponsored dredging project.

## **E. NR 500 Solid Waste Regulation and Approvals**

Dredged material is considered a solid waste under Wisconsin statutes and case law. As explained below, however, disposal of most dredged material is exempted from normal solid



waste regulation by the WDNR's Waste Management Program (s. 289.43(8), Wis. Stats, and s. NR 500.08(3), Wis. Adm. Code).

Wisconsin's solid waste statutes (Ch. 289, Wis. Stats.) and regulatory codes (chs. NR 500 through NR 520, Wis. Adm. Code) are primarily directed at the regulation of complex land disposal facilities, also referred to as solid waste landfills. Dredged material disposal sites can be regulated in a manner similar to landfills; however, most are exempted from solid waste program regulation by rule or on a case-by-case basis. Projects likely to be subject to formal regulation are those that include large volumes of dredged material, contaminated dredged material, engineered structures, or those proximate to a protected resource such as wetlands.

### **Dredged Material Wastes Exempt by Rule**

S. NR 500.08(3), Wis. Adm. Code, lists several types of facilities for disposal of non-contaminated dredged material which are exempted by rule. For those facilities that qualify for this exemption, any Department requirements for disposal would be exercised through the dredging permit. Formal solid waste regulation would not be invoked, as long as the disposal site complied with performance standards of s. NR 504.04(4), Wis. Adm. Code. This exemption by rule is based on certain presumptions about the environmental impact of projects. Where the WDNR has enough information to judge that the sediment is not contaminated or where disposal will not cause problems, the exemption by rule can apply.

The NR 500.08(3) exemption by rule does not apply to volumes of 3,000 cubic yards or greater from the Great Lakes, the Mississippi River and certain water bodies where historical contamination or a large number of dischargers existed or is still present. The exemption by rule also does not apply if the WDNR has reason to believe that the performance standards of s. NR 504.04(4), Wis. Adm. Code would be violated.

### **Dredged Material Wastes Exempt Following Case-by-Case Review**

According to s. 289.43(8), Wis. Stats., the WDNR can exempt certain solid waste facilities from the licensed landfill siting process on a case-by-case basis. The applicant still has to demonstrate that the project will not cause violations of standards or threaten protected resources, like groundwater quality, surface water quality, wetland functional values, critical habitat, or endangered species.

The intent of this statute is to allow the applicant to tailor the design, active life, closure, etc., of the disposal facility to the size and requirements of the dredging project. The exemption can require a facility design with any type containment needed, ranging from filling a depression in the landscape to an engineered design with a liner, leachate collection, and final cover similar to a licensed landfill.

An applicant has to prepare a plan and submit an application to the WDNR for case-by-case review. The WDNR recommends that the following items to be included as part of a request for a grant of exemption:

- de-water dredged material as much as possible to allow for proper placement.

- disposal in an upland location that is not a wetland, critical habitat area, recharge area for private or public water supply wells
- confine to as limited an area as practicable
- confine to as limited a volume as practicable
- cover with soil if necessary to prevent erosion and direct contact. (Thicker cover (1 to 3 feet) may be necessary if there is greater concern for contact.)
- post-dredging reporting to the WDNR to document the disposal location, cover, volume used, changes made, etc.

It is also possible that the WDNR would require a greater degree of containment or isolation due to higher contaminant concentrations, greater concern about toxicity or leaching of certain types of contaminants or other factors. Early discussion with WDNR staff will help to define degree of containment that has to be designed for.

#### Public Meeting Required for Solid Waste Decisions

Before a formal solid waste approval can be issued, s. 289.54, Wis. Stats., requires the WDNR to hold a public meeting in the city, village or town where disposal of dredged material is proposed to take place. The statute specifically states that this is applicable to any dredged material that contains PCBs or heavy metals in concentrations of less than 50 ppm. Given that dredged material will show a range of concentrations, the effect of this statute is to require a public meeting prior to issuing a Waste Management program approval for any dredged material disposal project. At these meetings, the Department will expect the applicant to present an overview of the proposal. Comments will be recorded and considered for utility in the approval requirements. If the dredged material is determined to be exempt from solid waste regulation (either by rule or on a case-by-case basis), then no public meeting is required.

### **Beneficial Reuse of Dredged Materials**

According to s. NR 500.08(5), Wis. Adm. Code, the WDNR may grant exemptions from normal solid waste regulatory requirements for the purpose of allowing or encouraging the recycling of solid wastes. While there is no specific beneficial reuse code applicable to dredged material, s. NR 347.01(2) states the WDNR policy of encouraging the beneficial reuse of dredged materials. Beneficial reuse can be addressed under the dredging permit, for projects which are eligible for the code exemption under s. NR 500.08(3), or by a case-by-case low hazard exemption under s. 289.43(8), Wis. Stats.

In support of the WDNR's policy to encourage beneficial reuse projects, the WDNR is a member of the Great Lakes Dredging Team and contributes to the beneficial reuse initiative and guidance documents developed by that Team (see [www.glc.org/dredging](http://www.glc.org/dredging)). Examples of a beneficial reuse projects include landfill cover as approved in a Plan of Operation, habit creation, beach nourishment, construction fill materials, and soil amendment.

### **Landspreading of Dredged Materials**

This alternative is not commonly used and is probably most applicable to inland lake dredging projects with highly organic, mucky sediments which can be easily removed and land-applied by hydraulic pumping. At a minimum, it has to be shown that the use of the dredged material will cause no harm or additional contamination. For landspreading proposals, it is desirable to be able to demonstrate a benefit for the intended use of the land.

There are two possible WDNR Waste Management regulatory approaches for landspreading projects.

A landspreading plan can be accepted and reviewed under Chap. NR 518, Wis. Adm. Code. This is most applicable to repetitive dredging actions. Code requirements are similar to the information required for land application of municipal treatment plant sludge. A formal approval will be issued following one step review process. No solid waste license is required but plan review fees are listed in Chap. NR 520, Wis. Adm. Code. The dredged material would have to be characterized, and appropriate land application limits would have to be defined on a case-by-case basis.

Land application can also be allowed under the low hazard case-by-case grant of exemption under s. 289.43(8), Wis. Stats. This approach is more appropriate for one-time dredging actions.

### **Approval to Dispose of Dredged Materials in an Existing Landfill**

Disposal of dredged material in an existing licensed solid waste landfill involves relatively little direct interaction with the Department but does require negotiations with the landfill operator. A landfill that does not already have an approval to accept dredged material would have to submit a modification to its plan of operation to the WDNR.

Landfill disposal is not a popular choice for dredged material that is considered to be uncontaminated, but it may be the most practical choice for smaller dredging projects dealing with contaminated dredged material. In some instances, the landfill operator can use dredged material for certain landfill construction purposes.

### **Approval of a New Landfill for Dredged Materials**

For dredged material that is not eligible for the code-based or a case-by-case exemption, disposal in a dedicated licensed landfill is possible. The applicant would have to follow the licensed landfill siting process in ch. 289, Stats., and chs. NR 500 to NR 520, Wis. Adm. Code. This process is well defined, but highly intensive in terms of demands on time and resources. It can take 3 to 7 years to complete.

Historically, there have been few efforts to site licensed landfills solely for dredged material, and none of those efforts were pushed to completion. This alternative is most likely for projects involving large volumes of contaminated sediment, to be dredged over a time span of several years.

Some of Wisconsin's waterways have been contaminated with PCBs. The alternatives for disposal of dredged material from those waterways can be subject to different regulatory requirements.

Sediment with PCB concentrations of less than 50 ppm would be regulated as a solid waste under WDNR authority, including Chaps. NR 157 and NR 500 to NR 520, Wis. Adm. Code. Sediment material contaminated by PCBs is usually not eligible for a low hazard exemption unless the concentrations are very low. For higher concentrations, disposal in a licensed landfill is normally required. For lower PCB concentrations, a range of disposal and beneficial reuse options should be considered on a case-by-case basis whether or not the material is deemed eligible for a low hazard exemption. Please refer to Guidance for Landspreading of PCB-Contaminated Solid Wastes - WA-39 for further information regarding landspreading of sediment materials containing PCBs.

Sediment with PCB concentrations of 50 ppm or greater is also regulated under federal law - in the Toxic Substances Control Act (TSCA). Applicants for TSCA-regulated dredged material are advised to dispose of it at an established commercial toxic/hazardous waste landfill rather than attempting to establish their own facility. The process of establishing a new TSCA-approved waste landfill would be at least as laborious as establishing a new solid waste landfill, and probably more so.

TSCA also allows use of a mechanism called the TSCA coordinated approval. This involves WDNR working with USEPA Region 5 on review of an application to dispose of TSCA-level PCB-contaminated dredged material in a Wisconsin licensed solid waste landfill. The possibility of disposing of waste in a landfill that wasn't specifically designed under TSCA requirements is based on the level of engineering and construction oversight that the NR 500 to 520 codes require. Proposed plans by the applicant and the WDNR's review would have to meet certain additional requirements that USEPA Region 5 would expect to see addressed.

#### Disposal in a Confined Disposal Facility

Historically, a dredged material facility that has been constructed by the US Army Corps of Engineers (Corps) within the ordinary high water mark of a water body has been termed a "confined disposal facility" (CDF). This type of disposal is subject to agreements between local sponsor (municipality) and the Corps. The applicant for any new CDF would have to demonstrate that the facility is eligible for a low hazard exemption under s. 289.43(8), Wis. Stats. In that case, there would be no licensing or other requirements by the Waste Program under the landfill siting laws. However, there would be specific requirements in WPDES permits for the facility. With existing CDFs, the WDNR's Waste Program has been largely concerned with closure plans once the facility has filled to capacity.

## F. NR 150 Environmental Impact Determination

According to the Wisconsin Environmental Policy Act (s. 1.11, Wis. Stats.), all state agencies, including the WDNR, must evaluate and be aware of the environmental consequences of their

regulatory, management or administrative actions. Section NR 150.03, Wis. Adm. Code, establishes a "Type List" which categorizes WDNR actions.

For dredging projects, each WDNR action on a permit or approval would be categorized from the NR 150.03 Type List and there would be an opportunity for public input.

For a dredging permit under s. 30.20, Wis. Stats., the following would be considered a Type II action: 1) over 3000 cubic yards being dredged, 2) a potential for sediments characterized as a hazardous substance and involving more than 7 cubic yards being dredged, or 3) draining or filling of wetlands affecting more than five acres. Type II actions require the preparation of an Environmental Assessment (EA) and may require the preparation of an Environmental Impact Report (EIR). If the proposed action is determined to be a "major action significantly affecting the quality of the human environment," an Environmental Impact Statement (EIS) will be a required.

***(Note Regarding Appendix 3: This appendix contains a summary of WDNR requirements that may be applicable to dredging projects for commercial ports. This is not a complete listing of all state, federal and local requirements that could be applicable to a dredging project. See the legal notice and disclaimer on page 2 of this publication.)***